Navy Advancement Center

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Advancement Handbook For Aviation Ordnanceman

PREFACE

The purpose of the Advancement Handbook is to help you focus your preparation for Navywide advancement-in-rating examinations. The bibliographies (BIBs) together with this handbook form a comprehensive examination study package. Since this handbook provides skill and knowledge components for each paygrade of the Aviation Ordnance (AO) rating, it helps you concentrate your study on those areas that may be tested. This feature will help you get the most out of your study time.

Each page in Parts 1 through 4 of this Advancement Handbook presents general skill areas, specific skill areas, the knowledge factors associated with each skill area, the pertinent references that address each skill, and the subject areas that may be covered on the examination. The skill statements describe the skills you are expected to perform for each paygrade. The skill statements are <u>cumulative</u>; that is, you are responsible for the skills for the paygrade you are competing for, your present paygrade, and all paygrades below.

Although this handbook is very comprehensive, it cannot cover all the tasks performed in the rating. As a result, the advancement examinations may contain questions more detailed than described in the "Exam Expectations" section of the skill areas.

Remember that advancement competition is keen, so your keys to advancement include not only comprehensive advancement examination study but also sustained superior performance.

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Part 1

General AO Skill Area	Weapons Systems Maintenance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain aircraft weapons systems
Knowledge you should have to perform this skill:	 Aircraft Weapons Systems Installing and removing pylons on aircraft Troubleshooting and testing emergency jettison systems Troubleshooting and testing release systems Troubleshooting and testing arming systems Manufacturing electrical connectors Replacing knobs, lights, and fuses in cockpit weapons consoles Cleaning electrical and electronic equipment Applying preservatives to electrical and electronic components Performing emergency jettison checks Performing release checks Performing stray voltage checks
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapters 10 and 15 (NAVEDTRA 12309) Airborne Weapons/Stores Loading Manual F/A-18A/B/C/D, Chapters 3 and 4 (A1-F18AE-LWS-000) Airborne Weapons/Stores Loading Manual SH-60B, Chapters 4 and 5 (A1-H60BB-LWS-000) NATOPS Conventional Weapons Handling Procedures Manual Ashore, Chapter 2 (NAVAIR-00-80T-103) CV NATOPS Manual, Chapter 6 (NAVAIR 00-80T-105)

- Airborne Weapons/Stores Loading Manual F-14A/B/D, Chapters 2 and 4 (NAVAIR 01-F14AAA-75)
- Airborne Weapons/Stores Loading Manual S-3, Chapters 2, 3, and 4 (NAVAIR 01-S3AAA-75)
- Airborne Weapons/Stores Loading Manual P-3, Chapters 2, 4, and 5 (NAVAIR 01-75PA-75)
- Airborne Weapons/Stores Loading Manual A-6 Series, EA-6, KA-6, Chapters 2, 3, 4, and 5 (NAVAIR 01-85AD-75)
- The Naval Airborne Weapons Maintenance Program (NAWMP), Chapters 2, 4, and 5 (OPNAVINST 8600.2 VOL-1); Chapter 7 (OPNAVINST 8600.2 VOL-2); Appendices A-L (OPNAVINST 8600.2 VOL-3)

You can expect questions about the operation of aircraft weapons systems; installation and removal of pylons on aircraft; and troubleshooting and testing emergency jettison systems, release systems, and arming systems. You can also expect questions about manufacturing electrical connectors; replacing knobs, lights, and fuses in cockpit weapons consoles; cleaning and applying preservation to electrical and electronic equipment; performing emergency jettison checks; performing release checks and performing stray voltage checks on aircraft weapons systems. The questions may be of a general nature or specific to a type of procedure.

General AO Skill Area	Weapons Handling
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain and operate weapons elevators
Knowledge you should have to perform this skill:	 Operation of weapons elevators Size, type and location of weapons elevators Removing and replacing components of weapons elevators Bleeding and filling hydraulic lines and reservoirs on weapons elevators Removing and replacing hydraulic filters on weapons elevators Lubricating weapons elevator cables Weapons handling system elevator safety features
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapter 11 (NAVEDTRA 12309) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapters 4 and 6 (OPNAVINST 8600.2 VOL-2) Ships 3-M Maintenance, Material, and Management, Chapter 2 (OPNAVINST 4790.4) Ammunition Afloat, Chapter 2 (NAVSEA OP 4) Maintenance Manual for 8,000 pound Weapons Elevators Lower Stage, Chapters 1-7 (SG818-LL-MMA-020) Maintenance Manual for 10,500 pound Weapons Elevators Lower Stage, Chapters 1-7 (SG818-LF-MMA-020)

You can expect questions about basic operation, preventive maintenance, and repair of weapons elevator systems. The questions may be of a general nature or specific to a type of elevator system.

General AO Skill Area	Weapons Handling
A <i>skill</i> you are expected to perform from the General Skill Area above:	Operate ordnance motor vehicle (Explosive Driver)
Knowledge you should have to perform this skill:	 Qualifications for explosive drivers Handling and transporting hazardous materials and ordnance items Department of Defense regulations and state and local traffic laws Completing and filing required reports
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapter 12 (NAVEDTRA 12309) Ammunition Ashore, Chapter 1 (NAVSEA OP 5 VOL-1) Motor Vehicle Driver's Handbook Ammunition, Explosives and Related Hazardous Materials, Chapters 1-8 (NAVSEA OP 2239) Motor Vehicle & Railcar Shipping Inspector's Manual, Chapters 1-5 (NAVSEA OP 3681) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapter 6 (OPNAVINST 8600.2 VOL-2) Navy Transportation Safety Handbook for Ammunition, Explosives and Related Hazardous Material, Chapters 1-9 (NAVSEA SW020-AG-SAF-010)

You can expect questions about qualifications for explosive drivers; handling and transporting hazardous materials and ordnance items; Department of Defense regulations; state and local traffic laws; and completing and filing required reports. The questions may be of a general nature or specific to a type of ordnance motor vehicle.

General AO Skill Area	Weapons Handling
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain tow banner assemblies
Knowledge you should have to perform this skill:	 Basic classes of tow targets Differences between tow target reeling machine-launcher systems Identifying towline construction Banner towing preparation instructions (Shipboard) Installing and removing tow targets Launching and recovering tow banners
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapter 8 (NAVEDTRA 12309) Aerial Tow Targets & Associated Equipment, Chapters 1-10 (NAVAIR 28-10A-501) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapters 1 and 5 (OPNAVINST 8600.2 VOL-2)
Exam Expectations. These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about the basic classes of tow targets, identifying towline construction, differences between the tow target reeling machine-launcher systems, banner towing preparation instructions (Shipboard) and launching and recovering tow banners. The questions may be of a general nature or specific to a type of tow banner assemblies.

General AO Skill Area	Weapons Handling
A <i>skill</i> you are expected to perform from the General Skill Area above:	Identify and set Hazards of Electromagnetic Radiation to Ordnance (HERO) conditions
Knowledge you should have to perform this skill:	 HERO classification standards HERO hazards Uses of the emission control (EMCON) bill Operating procedures and precautions to prevent premature initiation of electroexplosive devices (EED's) in ordnance from electromagnetic radiation (EMR) Setting HERO conditions
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapter 11 (NAVEDTRA 12309) Ammunition Afloat, Chapter 2 (NAVSEA OP 4) Ammunition Ashore, Chapters 2, 5, 7, and 8 (NAVSEA OP 5 VOL-1) Electromagnetic Radiation Hazards, Chapters 1-8 (NAVSEA OP 3565/NAVAIR 16-1-529 VOL-1) Electromagnetic Radiation Hazards, Chapters 1-6 (NAVSEA OP 3565/NAVAIR 16-1-529 VOL-2 PART-1) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapter 6 (OPNAVINST 8600.2 VOL-2)

You can expect questions about recognizing HERO classification standards, identifying HERO hazards, the usage of the emission control (EMCON) bill, operating procedures and precautions to prevent premature initiation of electroexplosive devices (EED's) in ordnance from electromagnetic radiation (EMR), and setting HERO conditions. The questions may be of a general nature or specific to a type of Hazards of Electromagnetic Radiation to Ordnance.

General AO Skill Area	Armament Weapons Support Equipment (AWSE)
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain armament weapons support equipment
Knowledge you should have to perform this skill:	 Repairing and replacing components on material handling equipment Testing components on material handling equipment Periodic weight testing for ordnance handling equipment Charging electrical explosive forklifts Inspecting and configuring Armament Weapons Support Equipment Repairing Armament Weapons Support Equipment
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapter 9 (NAVEDTRA 12309) Airborne Weapons Support Equipment Description & Characteristics, Chapters 1-30 (NAVAIR 11-140-24) Airborne Weapons Support Equipment Configuration Manual, Chapters 1-18 (NAVAIR 11-140-25) Bomb Skid Assembly Aero 12C, Work Package 001 (NAVAIR 19-15BC-12) Munitions Trailer Aero 51B, D, Work Packages 001-008 (NAVAIR 19-25E-51) Small Munitions Trailer MHU 126/M, A/M, Work Packages 001-010 (NAVAIR 19-25E-61) Munitions Trailer MHU 185/M, Work Packages 001-013 (NAVAIR 19-25E-510)

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	 Approved Handling Equipment for Weapons & Explosives, Chapters 1-28 (NAVSEA OP 2173 VOL-1) Approved Handling Equipment for Weapons & Explosives, Chapters 29-54 (NAVSEA OP 2173 VOL-2) Handling and Stowage of Naval Ordnance Aboard Naval Ships, Chapters 1-5 (NAVSEA OP 3206 VOL-1) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapter 8 (OPNAVINST 8600.2 VOL-2) Periodic Testing Arrangement for Ordnance Handling Equipment, Chapters 1-4 (NAVSEA SG420-AP-MMA-010) Handling Ammunition & Explosives with Industrial Materials Handling Equipment (MHE), Chapters 1-6 (NAVSEA SW023-AH-WHM-010)
Exam Expectations. These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about repairing, replacing, and testing components on material handling equipment; periodic weight testing for ordnance handling equipment; charging electrical explosive forklifts; and inspecting, configuring and repairing Armament Weapons Support Equipment. The questions may be of a general nature or specific to a type of Armament Weapons Support Equipment.

General AO Skill Area	Bombs
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain bombs
Knowledge you should have to perform this skill:	 Assembling and disassembling general purpose bombs Assembling and disassembling guided and cluster bomb units Preparing fuzes for installation in bombs Installing and removing bomb fuzes Installing and removing arming wires
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapters 1 and 13 (NAVEDTRA 12309) Walleye I Guided Weapons Mk 21 & 29 All Mods, Work Packages 001-022 (NAVAIR 01-15MGA-3-2) Walleye II Guided Weapons Mk 5, 23, 30 All Mods, Work Packages 001-013 (NAVAIR 01-15MGB-3-2) Laser Guided Bomb GBU 12C/B, D/B, 16A/B, B/B, 10D/B, E/B, Work Packages 001-015 (NAVAIR 01-15MGD-1) Description & Characteristic Airborne Bomb & Rocket Fuze Manual, Chapters 1-5 (NAVAIR 11-1F-2) A/C GP Bombs, Fire Bombs, Practice Bombs & Components, Chapters 1-8 (NAVAIR 11-5A-17) Airborne Weapons Assembly Mk 80/BLU Series, Mk 77 Fire, Practice Bombs, Chapters 1-11 (NAVAIR 11-140-5) Airborne Weapons Assembly Cluster Bomb Units, Chapters 1-17 (NAVAIR 11-140-9) Airborne Weapons Assembly Paveway II, III, GBU, Chapters 1-8 (NAVAIR 11-140-10)

	The Naval Airborne Weapons Maintenance Program (NAWMP), Chapter 2 (OPNAVINST 8600.2 VOL-2)
Exam Expectations. These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about assembling and disassembling general-purpose bombs, and about guided and cluster bomb units. You can also expect questions about preparing, installing, and removing bomb fuzes with arming wire. The questions may be of a general nature or specific to a type of bomb.

General AO Skill Area	Guns
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain guns
Knowledge you should have to perform this skill:	 Performing functional checks on aircraft gun systems Boresighting guns Removing and replacing aircraft gun system components Removing and replacing linkless ammunition loading systems (LALS) Removing and replacing chute elements Adjusting head space on aircraft guns Gauging conveyor elements of aircraft gun systems Troubleshooting aircraft gun circuits Performing bore erosion checks Loading and unloading aircraft guns Installing and removing aircraft gun assemblies Removing and replacing aircraft gun barrels Testing aircraft gun circuits
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapters 6, 7, and 15 (NAVEDTRA 12309) Gun System F/A-18A/B/C/D, Work Package 001-030 (A1-F18AC-750-300) Airborne Weapons/Stores Loading Manual F/A-18A/B/C/D, Chapters 2, 4, and 27 (A1-F18AE-LWS-000) Armament Systems F-14A, B, A/C, Work Packages 001-109 (NAVAIR 01-F14AAA-2-4-13)

- Airborne Weapons/Stores Loading Manual F-14A/B/D, Chapters 2, 4, and 18 (NAVAIR 01-F14AAA-75)
- Airborne Weapons/Stores Loading Manual A-6 Series, EA-6, KA-6, Chapter 2 (NAVAIR 01-85AD-75)
- Ammunition for 20mm/25mm A/C Guns, Chapters 1-10 (NAVAIR 11-1-119)
- M61A1 20mm Automatic Gun, Chapters 1-7 (NAVAIR 11-95M61A.1)
- Ammunition Handling and Gun Drive System, Work Packages 001-018 (NAVAIR 11-95M61A1.2)
- Linkless Ammunition Loading System: Conveyor MHU-130, Loader Ammo Transporter MHU-130, Drum Unload Assembly MHU-132, Drum Load Assembly MHU-133, Chapters 1-6 (NAVAIR 19-1-125)
- Linkless Ammunition Loading System A/E32K-7, Work Packages 001-004 (NAVAIR 19-1-267)
- Linkless Ammunition Loading System A/E32K-7, Work Packages 001-012 (NAVAIR 19-1-269)
- The Naval Airborne Weapons Maintenance Program (NAWMP), Chapter 3 (OPNAVINST 8600.2 VOL-2)

You can expect questions about performing functional checks on aircraft gun systems, removing and replacing aircraft gun system components; linkless ammunition loading systems (LALS); chute elements and aircraft gun barrels. You can also expect questions about adjusting headspace, gauging conveyor elements, and boresighting aircraft guns. You can also expect questions about troubleshooting aircraft gun circuits, performing bore erosion checks, loading and unloading aircraft guns, installing and removing aircraft gun assemblies, and testing aircraft gun circuits. The questions may be of a general nature or specific to a type of aircraft gun system.

General AO Skill Area	Missiles
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain missiles
Knowledge you should have to perform this skill:	 Canning and De-canning missiles Cleaning and preserving missiles and missile components Striking up and down missiles and components Receiving, turnaround, and issuing missiles Arming and De-arming missiles
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapters 3, 14, and 15 (NAVEDTRA 12309) Airborne Weapons/Stores Loading Manual F/A-18A/B/C/D, Chapters 2, 4, 19, 20, 21, 23, 24, and 25 (A1-F18AE-LWS-000) Airborne Weapons/Stores Loading Manual SH-60B, Chapters 2, 4, 5, and 12 (A1-H60BB-LWS-000) AGM-65F (IR) & 65E (Laser) Maverick Missiles on F/A 18 A/C, Pages 1-62 (NAVAIR 01-AGM65E/F-1-2) AIM-9H/M Guided Missile and Training Missile, Work Packages 001-011 (NAVAIR 01-AIM9-2) Armament Systems F-14A, B, A/C, Work Packages 001-109 (NAVAIR 01-F14AAA-2-4-13) Airborne Weapons/Stores Loading Manual F-14A/B/D, Chapters 2, 3, 4, and 14-16 (NAVAIR 01-F14AAA-75) Airborne Weapons/Stores Loading Manual S-3, Chapters 2, 3, 4, and 21 (NAVAIR 01-S3AAA-75)

- Airborne Weapons/Stores Loading Manual P-3, Chapters 2, 3, 4, 16, 18, and 19 (NAVAIR 01-75PA-75)
- Airborne Weapons/Stores Loading Manual A-6 Series, EA-6, KA-6, Chapters 2, 3, 4, and 19-23 (NAVAIR 01-85AD-75)
- Airborne Weapons Packaging/Handling/Stowage Shipboard, Chapter 6 (NAVAIR 11-120A1.2 VOL-2)
- The Naval Airborne Weapons Maintenance Program (NAWMP), Chapter 1 (OPNAVINST 8600.2 VOL-2), Appendices J and L (OPNAVINST 8600.2 VOL-3)
- Handling & Stowage of Air-Launched Weapons Aboard Amphibious Ships, Chapters 1-5 (SG420-B5-WHS-010)
- Inspection Requirements for Receipt, Segregation stowage & Issue of Navy & Marine Corp Conventional Ammunition, Chapters 1-6 (NAVSEA TW010-AC-ORD-010)

You can expect questions about canning and decanning, cleaning and preserving missiles and missile components, striking up and down missiles and missile components, receiving, turning around, and issuing of missiles, and arming and de-arming missiles. The questions may be of a general nature or specific to a type of missile.

General AO <i>Skill Area</i>	Rockets
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain rockets
Knowledge you should have to perform this skill:	 Rocket components The purpose and use of service rocket assemblies Principles of rocket propulsion Rocket and rocket fuze terminology Striking up and striking down rockets Loading and downloading rockets
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapters 2 and 13 (NAVEDTRA 12309) Airborne Weapons/Stores Loading Manual F/A-18A/B/C/D, Chapters 2, 4, and 18 (A1-F18AE-LWS-000) Airborne Weapons/Stores Loading Manual S-3, Chapters 2, 4, and 20 (NAVAIR 01-S3AAA-75) Airborne Weapons/Stores Loading Manual P-3, Chapters 2, 4, and 17 (NAVAIR 01-75PA-75) Airborne Weapons/Stores Loading Manual A-6 Series, EA-6, KA-6, Chapters 2, 4, and 18 (NAVAIR 01-85AD-75) Description & Characteristic Airborne Bomb & Rocket Fuze Manual, Chapter 4 (NAVAIR 11-1F-2) 2.75-inch Airborne Rocket Launchers LAU 61A/A, B/A, C/A, 68B/A, D/A, Chapters 1-8 (NAVAIR 11-75A-61) 5.0-inch Airborne Rocket Launchers LAU 10 Series, Chapters 1-10 (NAVAIR 11-75A-63) Airborne Rockets, Chapters 1-7 (NAVAIR 11-85-5)

	 Airborne Weapons Packaging/Handling/Stowage Shipboard, Chapter 8 (NAVAIR 11-120A1.2 VOL-2) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapter 2 (OPNAVINST 8600.2 VOL-2) Inspection Requirements for Receipt, Segregation stowage & Issue of Navy & Marine Corp Conventional Ammunition, Chapters 1-6 (NAVSEA TW010-AC-ORD-010)
Exam Expectations. These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about identifying rocket components, the purpose and use of service rocket assemblies, principles of rocket propulsion, rocket and rocket fuze terminology, striking up and down rockets, loading and downloading rockets. The questions may be of a general nature or specific to a type of rocket.

General AO Skill Area	Launchers
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain launchers
Knowledge you should have to perform this skill:	 Launcher shipping configurations Launcher common components Charging missile launcher nitrogen bottles Inspecting nitrogen bottles on missile launchers Purging missile launchers Removing and replacing launchers Testing and checking launchers Troubleshooting and repairing Loading and downloading launchers
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapters 2, 3, 14, and 15 (NAVEDTRA 12309) Aircraft Guided Missile Launcher LAU-115/A, A/A, B/A, C/A, Work Packages 001-014 (AW-394AC-750-000) Airborne Weapons/Stores Loading Manual F/A-18A/B/C/D, Chapters 2-5, 18-21, and 23-25 (A1-F18AE-LWS-000) Airborne Weapons/Stores Loading Manual SH-60B, Chapters 2, 4, 5, and 13 (A1-H60BB-LWS-000) AGM-65F (IR) & 65E (Laser) Maverick Missiles on F/A 18 A/C, Pages 1-62 (NAVAIR 01-AGM65E/F-1-2) Airborne Weapons/Stores Loading Manual F-14A/B/D, Chapters 2-5, 14, 15, and 16 (NAVAIR 01-F14AAA-75) Armament Systems F-14A, B, A/C, Work Packages 017-020 (NAVAIR 01-F14AAA-2-4-13)

• Airborne Weapons/Stores Loading Manual S-3, Chapters 2-5, and 20 (NAVAIR 01-S3AAA-75) • Airborne Weapons/Stores Loading Manual P-3, Chapters 2-5, 17, and 19 (NAVAIR 01-75PA-75) Airborne Weapons/Stores Loading Manual A-6 Series, EA-6, KA-6, Chapters 2-5, and 18 (NAVAIR 01-85AD-75) • A/C Guided Missile Launcher LAU 7/A Series, Work Packages 001-015 (NAVAIR 11-75A-54) • 2.75-inch Airborne Rocket Launchers LAU 61A/A. B/A, C/A, 68B/A, D/A, Chapters 1-8 (NAVAIR 11-75A-61) • 5.0-inch Airborne Rocket Launchers LAU 10 Series, Chapters 1-10 (NAVAIR 11-75A-63) • A/C Guided Missile Launcher LAU-118 (v) 1/A, Work Packages 001-011 (NAVAIR 11-75A-78) • A/C Guided Missile Launcher LAU-117 (a) 2/A, Work Packages 001-009 (NAVAIR 11-75A-79) • The Naval Airborne Weapons Maintenance Program (NAWMP), Chapter 7 (OPNAVINST 8600.2 VOL-2), Appendices A-L (OPNAVINST 8600.2 VOL-3) • Inspection Requirements for Receipt, Segregation stowage & Issue of Navy & Marine Corp Conventional Ammunition, Chapter 1-6 (NAVSEA TW010-AC-ORD-010) You can expect questions about launcher shipping Exam Expectations. These are subject areas you configurations, common components, purging and inspecting nitrogen charged missile launchers, should know to help you testing and checking launchers, and loading and answer exam questions downloading launchers. The questions may be of a correctly: general nature or specific to a type of launcher.

General AO Skill Area	Dispensers
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain dispensers
Knowledge you should have to perform this skill:	 The purpose and use of dispensers Maintenance level on dispensers Installing and removing spacer assemblies Removing and replacing dispensers Loading and downloading dispensers Testing and checking dispensers (troubleshooting and repairing)
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapters 1, 10, and 13 (NAVEDTRA 12309) Airborne Weapons/Stores Loading Manual F/A-18A/B/C/D, Chapters 2-5 (A1-F18AE-LWS-000) Airborne Weapons/Stores Loading Manual SH-60B, Chapters 2-5 and 10 (A1-H60BB-LWS-000) Airborne Weapons/Stores Loading Manual F-14A/B/D, Chapters 2-5 and 13 (NAVAIR 01-F14AAA-75) Airborne Weapons/Stores Loading Manual S-3, Chapters 2-5, 13, and 18 (NAVAIR 01-S3AAA-75) Airborne Weapons/Stores Loading Manual P-3, Chapters 2-5 and 21 (NAVAIR 01-75PA-75) Airborne Weapons/Stores Loading Manual A-6 Series, EA-6, KA-6, Chapters 2-5, 17, and 25 (NAVAIR 01-85AD-75) Dispenser and Mine A/C Weapons CBU 78/B (Gator), Work Packages 001-006 (NAVAIR 11-5A-33) Dispenser SUU 25F/A, Chapters 1-11 (NAVAIR 11-75AA-48)

	 Airborne Weapons Packaging/Handling/Stowage Shipboard, Chapter 4 (NAVAIR 11-120A1.1 VOL-1) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapters 2 and 6 (OPNAVINST 8600.2 VOL-2)
Exam Expectations. These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about the purpose and use of dispensers, maintenance level on dispensers, installing and removing spacer assemblies, removing and replacing dispensers, testing and checking dispensers, troubleshooting and repairing, and loading and downloading dispensers. The questions may be of a general nature or specific to a type of dispenser procedure.

General AO Skill Area	Anti-Submarine Warfare
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain anti-submarine warfare devices
Knowledge you should have to perform this skill:	 Making life and depth selections on sonobuoys Performing functional checks on sonobuoy launchers Removing and replacing sonobuoy launcher doors and seals Removing and replacing sonobuoy launchers and components Loading and downloading underwater weapons Assembling and disassembling aircraft mines Taking and recording mercury battery temperatures
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapters 1, 4, 5, and 14 (NAVEDTRA 12309) Airborne Weapons/Stores Loading Manual F/A-18A/B/C/D, Chapters 2-5, 11, and 12 (A1-F18AE-LWS-000) Airborne Weapons/Stores Loading Manual SH-60B, Chapters 2-6 (A1-H60BB-LWS-000) Airborne Weapons/Stores Loading Manual F-14A/B/D, Chapters 2-5 and 7 (NAVAIR 01-F14AAA-75) Airborne Weapons/Stores Loading Manual S-3, Chapters 2-5, 7, 9-12, 17, and 19 (NAVAIR 01-S3AAA-75) Airborne Weapons/Stores Loading Manual P-3, Chapters 2-5, 7, 9-12, 14, and 15 (NAVAIR 01-75PA-75)

- Airborne Weapons/Stores Loading Manual A-6 Series, EA-6, KA-6, Chapters 2-5, 7, and 11 (NAVAIR 01-85AD-75)
- Airborne Weapons Packaging/Handling/Stowage Shipboard, Chapter 3 (NAVAIR 11-120A1.1 VOL-1)
- The Naval Airborne Weapons Maintenance Program (NAWMP), Chapter 2 (OPNAVINST 8600.2 VOL-2)
- Pyrotechnic, screening, Marking & Countermeasure Devices, Chapter 7 (NAVSEA SW050-AB-MMA-010/NAVAIR 11-15-7 VOL-1)
- Inspection Requirements for Receipt, Segregation stowage & Issue of Navy & Marine Corp Conventional Ammunition, Chapters 1-6 (NAVSEA TW010-AC-ORD-010)

You can expect questions about making life and depth selections on sonobuoys; performing functional checks on sonobuoy launchers; removing and replacing sonobuoy launcher doors and seals; sonobuoy launchers and components; loading and downloading underwater weapons; assembling and disassembling aircraft mines, and taking and recording mercury battery temperatures. The questions may be of a general nature or specific to a type of anti-submarine warfare device.

General AO Skill Area	Magazines
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain magazines
Knowledge you should have to perform this skill:	 Testing and checking magazine safety devices Inspecting components of ship's pneumatic and manual bomb hoists Repairing components of ship's pneumatic and manual bomb hoists Breaking out ordnance Stowing ordnance Striking up and striking down ordnance Issuing, breaking out, and stowing air launched weapons Receiving, issuing and turning in Aircrew Escape Propulsion Systems Issuing, breaking out, and stowing small arms Cleaning and inspecting magazines Recording magazine temperatures Replacing grounding cables in magazines Removing and replacing magazine sprinkler systems components Testing, checking, and repairing magazine sprinkler systems
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapters 11, 12, and 13, (NAVEDTRA 12309) NATOPS Conventional Weapons Handling Procedures Manual Ashore, Chapters 1-6 (NAVAIR-00-80T-103) CV NATOPS Manual, Chapter 6 (NAVAIR 00-80T-105) LHA/LPH/LHD NATOPS Manual, Chapter 6 (NAVAIR 00-80T-106)

- Airborne Weapons Packaging/Handling/Stowage Shipboard, Chapters 1-5 (NAVAIR 11-120A1.1 VOL-1)
- Airborne Weapons Packaging/Handling/Stowage Shipboard, Chapters 6-10 (NAVAIR 11-120A1.2 VOL-2)
- Shipboard Ammunition Handling & Stowage (Chapter 700 S9086-XG-STM-010), ALL (NSTM CHAPTER 700)
- Ammunition Afloat, Chapters 1-7 (NAVSEA OP 4)
- Ammunition Ashore, Chapters 1-13 (NAVSEA OP 5 VOL-1)
- Ammunition Ashore Advance Bases, Chapters 1-7 (NAVSEA OP 5 VOL-3)
- Handling and Stowage of Naval Ordnance Aboard Naval Ships, Chapters 1-5 (NAVSEA OP 3206 VOL-1)
- Handling & Stowage of Amphibious Assault Ammunition aboard Amphibious Ships, Chapters 1-6 (NAVSEA OP 4550)
- Ships 3-M Maintenance, Material, and Management, Chapters 1-7 (OPNAVINST 4790.4)
- The Naval Airborne Weapons Maintenance Program (NAWMP), Chapter 6 (OPNAVINST 8600.2 VOL-2)
- Handling & Stowage of Air-Launched Weapons Aboard Amphibious Ships, Chapters 1-6 (SG420-B5-WHS-010)
- Magazine Sprinkling Systems, Chapters 1-5 (S9522-AA-HBK-010)
- Inspection Requirements for Receipt, Segregation stowage & Issue of Navy & Marine Corp Conventional Ammunition, Chapters 1-6 (NAVSEA TW010-AC-ORD-010)

You can expect questions about testing and checking magazine safety devices, inspecting and repairing pneumatic and manual bomb hoists, breaking out, issuing, striking up and down, and stowing ordnance. You can also expect questions about receiving, issuing, and turning in Aircrew Escape Propulsion Systems. You may also expect questions about issuing, breakout, and stowing small arms; cleaning and inspecting magazines; recording magazine temperatures; replacing grounding cables in magazines; removing and replacing magazine sprinkler systems components; and testing, checking, and repairing magazine sprinkler systems. The questions may be of a general nature or specific to a type of magazine.

General AO Skill Area	Quality Assurance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Perform quality assurance tasks
Knowledge you should have to perform this skill:	 Managing Dispersed Technical Publication Libraries Updating toolbox inventory sheets Inspecting tool containers for missing, damaged, or broken tools Searching for missing tools Preparing broken and missing tool reports Reviewing Hazardous Material (HAZMAT) Inventories Reviewing Material Safety Data Sheets (MSDS) Cleaning hazardous containers Performing acceptance, transfer, daily, and turn around inspections on weapons and racks Performing aircraft preflight and post flight inspections Inspecting aircraft for Foreign Object Damage (FOD) upon completion of maintenance actions Inspecting aircraft ordnance prior to loading Inspecting missiles prior to issuing Performing tone checks on missiles
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapters 3, 10, 11, 13, and 14 (NAVEDTRA 12309) Airborne Weapons/Stores Loading Manual F/A-18A/B/C/D, Chapters 1-5 (A1-F18AE-LWS-000) Airborne Weapons/Stores Loading Manual SH-60B, Chapter 1-5 (A1-H60BB-LWS-000) AIM-9H/M Guided Missile and Training Missile, Work Packages 001-011 (NAVAIR 01-AIM9-2)

- Armament Systems F-14A, B, A/C, Work Packages 001-109 (NAVAIR 01-F14AAA-2-4-13)
- Airborne Weapons/Stores Loading Manual F-14A/B/D, Chapters 1-4 (NAVAIR 01-F14AAA-75)
- Airborne Weapons/Stores Loading Manual S-3, Chapters 1-4 (NAVAIR 01-S3AAA-75)
- Airborne Weapons & Associated Equipment Consumable Material Applications & Hazardous Material Authorized Use List, Work Packages 001-012 (NAVAIR 01-1A-75)
- Airborne Weapons/Stores Loading Manual P-3, Chapters 1-4 (NAVAIR 01-75PA-75)
- Airborne Weapons/Stores Loading Manual A-6 Series, EA-6, KA-6, Chapters 1-4 (NAVAIR 01-85AD-75)
- Bomb Rack BRU 12/A, Chapters 1-9 (NAVAIR 11-5C-23)
- Bomb Rack BRU 14/A, 15/A, Chapters 1-9 (NAVAIR 11-5E-18)
- Bomb Ejector Rack BRU 10/B including BRU 10/A, 11/A/B, Chapters 1-10 (NAVAIR 11-10C-20)
- Bomb Ejector Rack BRU 10/B including BRU 10A/B through 11A/A, Chapters 1-10 (NAVAIR 11-10C-24)
- MER/TER, Chapters 1-9 (NAVAIR 11-75A-57)
- The Naval Aviation Maintenance Program (NAMP), Chapters 12 and 14 (OPNAVINST 4790.2 VOL-1); Chapter 8 (OPNAVINST 4790.2 VOL-3); Chapters 8, 11, 12, and 20 (OPNAVINST 4790.2 VOL-5)
- Navy Occupational Safety & Health (NAVOSH) for Forces Afloat, All chapters (OPNAVINST 5100.19 V1, 2&3)
- The Naval Airborne Weapons Maintenance Program (NAWMP), Chapters 1, 4, and 5 (OPNAVINST 8600.2 VOL-1), Chapters 1, 6, and 8 (OPNAVINST 8600.2 VOL-2)

- Navy Transportation Safety Handbook for Ammunition, Explosives and Related Hazardous Material, Chapters 1-9 (NAVSEA SW020-AG-SAF-010)
- Inspection Requirements for Receipt, Segregation, Stowage & Issue of Navy & Marine Corp Conventional Ammunition, Chapter 1-6 (NAVSEA TW010-AC-ORD-010)

You can expect questions about managing Dispersed Technical Publication Libraries; updating toolbox inventory sheets; inspecting tool containers for missing, damaged, or broken tools; searching for missing tools; preparing broken and missing tool reports; reviewing Hazardous Material (HAZMAT) Inventories; reviewing Material Safety Data Sheets (MSDS); and cleaning hazardous containers. You can also expect questions about performing acceptance, transfer, daily, and turn around inspections on weapons and racks, performing aircraft preflight and post-flight inspections and inspecting aircraft for Foreign Object Damage (FOD) upon completion of maintenance actions. You may also expect questions about inspecting aircraft ordnance prior to loading, inspecting missiles prior to issuing; and performing tone checks on missiles. The questions may be of a general nature or specific to a type of Quality Assurance task.

General AO Skill Area	Technical Administration
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain ordnance records
Knowledge you should have to perform this skill:	 Purpose of Conventional Ammunition Integrated Management System (CAIMS) Reports generated by Fleet Optical Scanning Ammunition Marking System (FOSAMS) Terms and definitions associated with ammunition requisitioning and turn-in Updating Equipment History Records Updating the ordnance loaded status board in flight deck control Updating Scheduled Removal Components Cards Researching Consolidated Shipboard Allowance Listing requirements
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapter 17 (NAVEDTRA 12309) Ammunition Afloat, Chapters 6 and 7 (NAVSEA OP 4) Ammunition Ashore, Chapters 1-3, 7, 10, 11 and 13 (NAVSEA OP 5 VOL-1) Ammunition Ashore Advance Bases, Chapters 1-3, 5, and 6 (NAVSEA OP 5 VOL-3) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapters 1, 4, and 5 (OPNAVINST 8600.2 VOL-1), Chapters 1-8, (OPNAVINST 8600.2 VOL-2), Appendices D, J, and H (OPNAVINST 8600.2 VOL-3) Inspection Requirements for Receipt, Segregation stowage & Issue of Navy & Marine Corp Conventional Ammunition, Chapters 1-6 (NAVSEA TW010-AC-ORD-010)

You can expect questions about the Conventional Ammunition Integrated Management System (CAIMS), reports generated by the Fleet Optical Scanning Ammunition Marking System (FOSAMS), terms and definitions associated with ammunition requisitioning and turn-in, updating Equipment History Records, and updating ordnance loaded status board in flight deck control. You can also expect questions about updating the Scheduled Removal Components Cards and researching Consolidated Shipboard Allowance Listing requirements. The questions may be of a general nature or specific to a type of technical administration procedure.

General AO Skill Area	Aviation Support Operations
A <i>skill</i> you are expected to perform from the General Skill Area above:	Performing aviation support operations
Knowledge you should have to perform this skill:	 Performing standard arming and safing signals Removing and replacing "O" rings, gaskets, and seals Pulling and installing safety pins Directing FOD walk downs Performing corrosion inspections Preparing surfaces for priming and painting Applying corrosion preventive compounds Applying primers and paints Cleaning hydraulic system components Lubricating hydraulic system components Cleaning pneumatic system components Lubricating pneumatic system components Performing emergency reclamation procedures Cleaning and cycling jettison ramps
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapters 13 and 14 (NAVEDTRA 12309) Aviation Maintenance Ratings, Chapters 4 and 5 (NAVEDTRA 12017) Aircraft Weapons Systems Cleaning and Corrosion Control, Chapters 1-9, Appendices A-E (NAVAIR 01-1A-509) Avionics Cleaning & Corrosion Prevention/Control, Chapters 1-10 (NAVAIR 16-1-540)

The Naval Aviation Maintenance Program
(NAMP), Chapters 2, 4, 5, 10, 12, and 16
(OPNAVINST 4790.2 VOL-1), Chapters 8 and 11
(OPNAVINST 4790.2 VOL-3), Chapters 8, 10, 12,
14, 15, and 18 (OPNAVINST 4790.2 VOL-5)
• The Naval Airborne Weapons Maintenance
Program (NAWMP), Chapters 1-6 and 8
(OPNAVINST 8600.2 VOL-2)

You can expect questions about performing standard arming and safing signals; removing and replacing "O" rings, gaskets, and seals; pulling and installing safety pins; and directing FOD walk downs. You can also expect questions about performing corrosion inspections; preparing surfaces for priming and painting; applying corrosion preventive compounds, primers, and paints; cleaning and lubricating hydraulic system components; cleaning and lubricating pneumatic system components; cleaning and cycling jettison ramps; and performing emergency reclamation procedures. The questions may be of a general nature or specific to a type of aviation support operation.

General AO Skill Area	Pyrotechnics and Countermeasures
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain pyrotechnics and countermeasures
Knowledge you should have to perform this skill:	 Stowing pyrotechnics and countermeasures Installing and removing Cartridge Actuated Devices (CADS) Loading and dispensing Marine Location Markers (Smokes) Arming and De-arming Marine Location Markers Loading and downloading parachute flares Assembling and disassembling Tactical Air Launched Decoys (TALD) and Improved Tactical Air Launched Decoys (ITALD) Loading and downloading TALD and ITALD Programming TALD and ITALD Loading and unloading expendable countermeasures Installing and removing CADS for chaff and flare circuit boards Configuring pyrotechnics for loading
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapters 4 and 11 (NAVEDTRA 12309) Airborne Weapons/Stores Loading Manual F/A-18A/B/C/D, Chapters 1-5, 14, 17, 26, and 30 (A1-F18AE-LWS-000) Airborne Weapons/Stores Loading Manual SH-60B, Chapters 1-5, 10, and 11 (A1-H60BB-LWS-000) Airborne Weapons/Stores Loading Manual F-14A/B/D, Chapters 1-5, 10, 13, and 17 (NAVAIR 01-F14AAA-75)

- Airborne Weapons/Stores Loading Manual S-3, Chapters 1-5, 13, 14, 18, 19, and 23 (NAVAIR 01-S3AAA-75)
- Airborne Weapons/Stores Loading Manual P-3, Chapters 1-5, 13, 14, and 21 (NAVAIR 01-75PA-75)
- Airborne Weapons/Stores Loading Manual A-6 Series, EA-6, KA-6, Chapters 1-5, 13, 17, and 29 (NAVAIR 01-85AD-75)
- General Use Cartridges (CADS), Chapters 1-13 (NAVAIR 11-100-1.1)
- General Use Cartridges (CADS), Chapters 1-5 (NAVAIR 11-100-1.3)
- The Naval Airborne Weapons Maintenance Program (NAWMP), Chapters 1-5 (OPNAVINST 8600.2 VOL-1), Chapters 2, 4, and 6 (OPNAVINST 8600.2 VOL-2), Appendix D (OPNAVINST 8600.2 VOL-3)
- Pyrotechnic, Screening, Marking & Countermeasure Devices, Chapters 1-14 (NAVSEA SW050-AB-MMA-010/NAVAIR 11-15-7 VOL-1)
- Inspection Requirements for Receipt, Segregation, Stowage & Issue of Navy & Marine Corp Conventional Ammunition, Chapter 1-6 (NAVSEA TW010-AC-ORD-010)

You can expect questions about installing and removing Cartridge Actuated Devices (CADS), loading, dispensing, arming, and de-arming Marine Location Markers (Smokes); loading and downloading parachute flares; and assembling, disassembling, loading, downloading. You can also expect questions about programming Tactical Air Launched Decoys (TALD) and Improved Tactical Air Launched Decoys (ITALD); loading and unloading expendable countermeasures; installing and removing CADS for chaff and flare circuit boards; and configuring pyrotechnics for loading. The questions may be of a general nature or specific to a type of pyrotechnic or countermeasure device.

General AO Skill Area	Aircraft Armament Equipment (AAE)
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain aircraft armament equipment
Knowledge you should have to perform this skill:	 Installing and removing buddy stores on aircraft Removing and replacing bomb shackles on aircraft Performing functional checks on Multiple Ejector Racks (MER)/Triple Ejector Racks (TER) Performing functional checks on Improved Multiple Ejector Racks (IMER)/Improved Triple Ejector Racks (ITER) Adjusting components of bomb racks Removing and replacing arming solenoids Cleaning, lubricating, and preserving aircraft armament equipment Troubleshooting bomb racks Removing and replacing bomb rack ejector units Removing and replacing bomb rack fairings Removing and replacing bomb rack MER/TER Removing and replacing bomb rack IMER/ITER Performing functional checks on bomb racks
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapters 10, 14, and 15 (NAVEDTRA 12309) Ejector Bomb Rack Assembly BRU-32/A, A/A, Work Packages 001-026 (AW-382AC-750-000) Vertical Ejector Rack Assembly BRU-33/A, A/A, Work Packages 001-031 (AW-382AC-750-010) Airborne Weapons/Stores Loading Manual F/A-18A/B/C/D, Chapters 1-6, 8-16, 18, 23-26, 29, and 30 (A1-F18AE-LWS-000) Airborne Weapons/Stores Loading Manual SH-60B, Chapters 1-5 and 13 (A1-H60BB-LWS-000)

- Armament Systems F-14A, B, A/C, Work Packages 104 and 105 (NAVAIR 01-F14AAA-2-4-13)
- Airborne Weapons/Stores Loading Manual F-14A/B/D, Chapters 1-11 and 17 (NAVAIR 01-F14AAA-75)
- Airborne Weapons/Stores Loading Manual S-3, Chapters 1-5 (NAVAIR 01-S3AAA-75)
- Airborne Weapons/Stores Loading Manual P-3, Chapters 1-5 (NAVAIR 01-75PA-75)
- Airborne Weapons/Stores Loading Manual A-6 Series, EA-6, KA-6, Chapters 1-15, 17, 18, and 29 (NAVAIR 01-85AD-75)
- (IMER) BRU 41A & (ITER) BRU 42/A, Chapters 1-9 (NAVAIR 11-5-603)
- Bomb Rack BRU 12/A, Chapters 1-9 (NAVAIR 11-5C-23)
- Bomb Rack BRU 14/A, 15/A, Chapters 1-9 (NAVAIR 11-5E-18)
- Bomb Ejector Rack BRU 10/B including BRU 10/A, 11/A/B, Chapters 1-10 (NAVAIR 11-10C-20)
- Bomb Ejector Rack BRU 10/B including BRU 10A/B through 11A/A, Chapters 1-10 (NAVAIR 11-10C-24)
- MER/TER, Chapters 1-9 (NAVAIR 11-75A-57)
- The Naval Airborne Weapons Maintenance Program (NAWMP), Chapters 1, 4, and 5 (OPNAVINST 8600.2 VOL-1); Chapters 1, 6, and 8 (OPNAVINST 8600.2 VOL-2)

You can expect questions about installing and removing buddy stores on aircraft, removing and replacing bomb shackles on aircraft, performing functional checks on Multiple Ejector Racks (MER)/Triple Ejector Racks (TER) and Improved Multiple Ejector Racks (IMER)/Improved Triple Ejector Racks (ITER). You can also expect questions about adjusting components of bomb racks, removing and replacing arming solenoids, cleaning, lubricating, and preserving aircraft armament equipment, troubleshooting bomb racks, removing and replacing bomb racks, bomb rack ejector units, bomb rack fairings, MER/TER, IMER/ITER, and performing functional checks on bomb racks. The questions may be of a general nature or specific to a type of aircraft armament equipment.

Part 2

General AO Skill Area	Weapons Systems Maintenance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain targets
Knowledge you should have to perform this skill:	 Preparing targets Basic classes of tow targets Identifying towline construction Differences between tow target reeling machine-launcher systems Installing and removing tow targets Launching and recovering tow banners
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapter 8 (NAVEDTRA 12309) Aerial Tow Targets & Associated Equipment, Chapters 1-10 (NAVAIR 28-10A-501) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapters 1 and 5 (OPNAVINST 8600.2 VOL-2)
Exam Expectations. These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about preparing targets, basic classes of tow targets, identifying towline construction, differences between tow target reeling machine-launcher systems, installing and removing tow targets, and launching and recovering tow banners. The questions may be of a general nature or specific to a type of tow target.

General AO Skill Area	Weapons Handling
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain and operate weapons elevators
Knowledge you should have to perform this skill:	 Troubleshooting weapons elevator hydraulic systems Troubleshooting weapons elevator electrical systems Performing weight test on weapons elevators Removing and replacing components of weapons elevators Weapons handling system elevator safety features Size, type and location of weapons elevators Operation of weapons elevators
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapter 11 (NAVEDTRA 12309) Ammunition Afloat, Chapter 2 (NAVSEA OP 4) Ships 3-M Maintenance, Material, and Management, Chapter 2 (OPNAVINST 4790.4) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapters 4 and 6 (OPNAVINST 8600.2 VOL-2) Maintenance Manual for 8,000 pound Weapons Elevators Lower Stage, Chapters 1-7 (SG818-LL-MMA-020) Maintenance Manual for 10,500 pound Weapons Elevators Lower Stage, Chapters 1-7 (SG818-LF-MMA-020)

You can expect questions about troubleshooting weapons elevator hydraulic and electrical systems, performing weight test on weapons elevators, removing and replacing components of weapons elevators, weapons handling system elevator safety features, size, type, and location of weapons elevators, and the operation of weapons elevators. The questions may be of a general nature or specific to a type of weapon elevator.

General AO Skill Area	Weapons Handling
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain armament weapons support equipment (AWSE)
Knowledge you should have to perform this skill:	Performing weight test on AWSEInspecting and configuring AWSERepairing AWSE
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapter 9 (NAVEDTRA 12309) Airborne Weapons Support Equipment Description & Characteristics, Chapters 1-30 (NAVAIR 11-140-24) Airborne Weapons Support Equipment Configuration Manual, Chapters 1-18 (NAVAIR 11-140-25) Bomb Skid Assembly Aero 12C, Work Package 001 (NAVAIR 19-15BC-12) Munitions Trailer Aero 51B, D, Work Packages 001-008 (NAVAIR 19-25E-51) Small Munitions Trailer MHU 126/M, A/M, Work Packages 001-010 (NAVAIR 19-25E-61) Munitions Trailer MHU 185/M, Work Packages 001-013 (NAVAIR 19-25E-510) Approved Handling Equipment for Weapons & Explosives, Chapters 1-28 (NAVSEA OP 2173 VOL-1) Approved Handling Equipment for Weapons & Explosives, Chapters 29-54 (NAVSEA OP 2173 VOL-2) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapter 8 (OPNAVINST 8600.2 VOL-2)

	Periodic Testing Arrangement for Ordnance Handling Equipment, Chapters 1-4 (NAVSEA SG420-AP-MMA-010)
Exam Expectations. These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about performing weight tests on AWSE, inspecting and configuring AWSE, and repairing AWSE. The questions may be of a general nature or specific to a type of Armament Weapons Support Equipment.

General AO Skill Area	Weapons Handling
A <i>skill</i> you are expected to perform from the General Skill Area above:	Prepare weapons for fleet unit issue loads
Knowledge you should have to perform this skill:	 Identifying weapons for fleet unit issue loads Configuring weapons for fleet unit issue loads Characteristics when preparing weapons for shipment Condition codes when preparing weapons for shipment
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapter 17 (NAVEDTRA 12309) NATOPS Conventional Weapons Handling Procedures Manual Ashore, Chapter 3 (NAVAIR-00-80T-103) CV NATOPS Manual, Chapter 6 (NAVAIR 00-80T-105) LHA/LPH/LHD NATOPS Manual, Chapter 6 (NAVAIR 00-80T-106) Airborne Weapons Packaging/Handling/Stowage Shipboard, Chapters 1-5 (NAVAIR 11-120A1.1 VOL-1); Chapters 6-10 (NAVAIR 11-120A1.2 VOL-2) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapter 4 (OPNAVINST 8600.2 VOL-1); Chapters 1, 4, and 8 (OPNAVINST 8600.2 VOL-2); Appendix J (OPNAVINST 8600.2 VOL-3) Identification of Ammunition, Chapters 1-11 (NAVSEA SW010-AF-ORD-010/NAVAIR 11-1-117) Navy Ammunition Logistic Code (NALC), Part 1-5 (TW010-AA-ORD-030/NAVAIR 11-1-116)

	• Inspection Requirements for Receipt, Segregation, Stowage & Issue of Navy & Marine Corp Conventional Ammunition, Chapters 1-6 and Appendices A-E (NAVSEA TW010-AC-ORD-010)
Exam Expectations. These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about identifying and configuring weapons for fleet unit issue loads, characteristics when preparing weapons for shipment, and condition codes when preparing weapons for shipment. The questions may be of a general nature or specific to a type of procedure when preparing weapons for shipment.

General AO Skill Area	Missiles/Rockets/Launchers/Dispensers
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain missiles, rockets, launchers, and dispensers
Knowledge you should have to perform this skill:	 Removing and replacing missile launching and firing sequence control boxes Receiving, turning around, and issuing missiles Arming and De-arming missiles Rocket and rocket fuze terminology Loading and downloading rockets Troubleshooting and repairing launchers Loading and downloading launchers Troubleshooting and repairing dispensers Loading and downloading dispensers
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapters 1-3, 10, and 13-15 (NAVEDTRA 12309) Aircraft Guided Missile Launcher LAU-115/A, A/A, B/A, C/A, Work Packages 001-014 (AW-394AC-750-000) Airborne Weapons/Stores Loading Manual F/A-18A/B/C/D, Chapters 1-5, 18-21, and 23-25 (A1-F18AE-LWS-000) Airborne Weapons/Stores Loading Manual SH-60B, Chapters 2, 4, 5, 10, 12, and 13 (A1-H60BB-LWS-000) AGM-65F (IR) & 65E (Laser) Maverick Missiles on F/A 18 A/C, Pages 1-62 (NAVAIR 01-AGM65E/F-1-2) AIM-9H/M Guided Missile and Training Missile, Work Packages 001-011 (NAVAIR 01-AIM9-2) Armament Systems F-14A, B, A/C, Work Packages 001-109 (NAVAIR 01-F14AAA-2-4-13)

- Airborne Weapons/Stores Loading Manual F-14A/B/D, Chapters 1-5 and 13-16 (NAVAIR 01-F14AAA-75)
- Airborne Weapons/Stores Loading Manual S-3, Chapters 1-5, 13, 18, 20, and 21 (NAVAIR 01-S3AAA-75)
- Airborne Weapons/Stores Loading Manual P-3, Chapters 1-5, 16-19, and 21 (NAVAIR 01-75PA-75)
- Airborne Weapons/Stores Loading Manual A-6 Series, EA-6, KA-6, Chapters 1-5, 17-23, and 25 (NAVAIR 01-85AD-75)
- Description & Characteristic Airborne Bomb & Rocket Fuze Manual, Chapter 4 (NAVAIR 11-1F-2)
- Dispenser and Mine A/C Weapons CBU 78/B (Gator), Work Packages 001-006 (NAVAIR 11-5A-33)
- A/C Guided Missile Launcher LAU 7/A Series, Work Packages 001-015 (NAVAIR 11-75A-54)
- 2.75-inch Airborne Rocket Launchers LAU 61A/A, B/A, C/A, 68B/A, D/A, Chapters 1-8 (NAVAIR 11-75A-61)
- 5.0-inch Airborne Rocket Launchers LAU 10 Series, Chapters 1-10 (NAVAIR 11-75A-63)
- A/C Guided Missile Launcher LAU-118 (v) 1/A, Work Packages 001-011 (NAVAIR 11-75A-78)
- A/C Guided Missile Launcher LAU-117 (a) 2/A, Work Packages 001-009 (NAVAIR 11-75A-79)
- Dispenser SUU 25F/A, Chapters 1-11 (NAVAIR 11-75AA-48)
- Airborne Rockets, Chapters 1-7 (NAVAIR 11-85-5)
- Airborne Weapons Packaging/Handling/Stowage Shipboard, Chapter 4 (NAVAIR 11-120A1.1 VOL-1); Chapters 6 and 8 (NAVAIR 11-120A1.2 VOL-2)
- The Naval Airborne Weapons Maintenance Program (NAWMP), Chapter 1 (OPNAVINST 8600.2 VOL-1); Chapter 2, 6, and 7 (OPNAVINST 8600.2 VOL-2); Appendices A-L (OPNAVINST 8600.2 VOL-3)

	 Handling & Stowage of Air-Launched Weapons Aboard Amphibious Ships, Chapters 1-5 (SG420-B5-WHS-010) Inspection Requirements for Receipt, Segregation Stowage & Issue of Navy & Marine Corp Conventional Ammunition, Chapters 1-6 (NAVSEA TW010-AC-ORD-010)
Exam Expectations. These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about removing and replacing missile launching and firing sequence control boxes; receiving, turning around, and issuing missiles; and arming and de-arming missiles. You can also expect questions about rockets and rocket fuze terminology and loading and downloading rockets. Questions could also cover troubleshooting, repairing, loading and downloading launchers and dispensers. The questions may be of a general nature or specific to a type of missile, rocket, launcher or dispenser.

General AO Skill Area	Magazines
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain magazines
Knowledge you should have to perform this skill:	 Testing, checking, and monitoring magazine security alarm systems Testing and checking magazine safety devices Removing and replacing magazine sprinkler systems components Utilizing computerized magazine arrangement planning aid
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapters 11, 12, and 13 (NAVEDTRA 12309) NATOPS Conventional Weapons Handling Procedures Manual Ashore, Chapters 1-6 (NAVAIR-00-80T-103) CV NATOPS Manual, Chapter 6 (NAVAIR 00-80T-105) LHA/LPH/LHD NATOPS Manual, Chapter 6 (NAVAIR 00-80T-106) Shipboard Ammunition Handling & Stowage (Chapter 700 S9086-XG-STM-010), ALL (NSTM CHAPTER 700) Ammunition Afloat, Chapters 1-7 (NAVSEA OP 4) Ammunition Ashore, Chapters 1-13 (NAVSEA OP 5 VOL-1) Ammunition Ashore Advance Bases, Chapters 1-7 (NAVSEA OP 5 VOL-3) Ships 3-M Maintenance, Material, and Management, Chapters 1-7 (OPNAVINST 4790.4) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapter 6 (OPNAVINST 8600.2 VOL-2)

	• Magazine Sprinkling Systems, Chapters 1-5 (S9522-AA-HBK-010)
Exam Expectations. These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about testing, checking, and monitoring magazine security alarm systems and magazine safety devices, removing and replacing magazine sprinkler systems components, and utilizing computerized magazine arrangement planning aid. The questions may be of a general nature or specific to a type of magazine.

General AO Skill Area	Quality Assurance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Perform quality assurance tasks
Knowledge you should have to perform this skill:	 Monitoring test equipment repair and calibration Preparing Conventional Ordnance Deficiency Reports (CODR) Reviewing tool inventories Performing Collateral Duty Inspections (CDI)
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapters 3, 10, 11, 13, and 14 (NAVEDTRA 12309) Airborne Weapons/Stores Loading Manual F/A-18A/B/C/D, Chapters 1-5 (A1-F18AE-LWS-000) Airborne Weapons/Stores Loading Manual SH-60B, Chapter 1-5 (A1-H60BB-LWS-000) Armament Systems F-14A, B, A/C, Work Packages 001-109 (NAVAIR 01-F14AAA-2-4-13) Airborne Weapons/Stores Loading Manual F-14A/B/D, Chapters 1-4 (NAVAIR 01-F14AAA-75) Airborne Weapons/Stores Loading Manual S-3, Chapters 1-4 (NAVAIR 01-S3AAA-75) Aircraft Weapons Systems Cleaning and Corrosion Control, Chapters 1-9 and Appendices A-E (NAVAIR 01-1A-509) Airborne Weapons/Stores Loading Manual P-3, Chapters 1-4 (NAVAIR 01-75PA-75) Airborne Weapons/Stores Loading Manual A-6 Series, EA-6, KA-6, Chapters 1-4 (NAVAIR 01-85AD-75)

	 The Naval Aviation Maintenance Program (NAMP), Chapters 12 and 14 (OPNAVINST 4790.2 VOL-1); Chapter 8 (OPNAVINST 4790.2 VOL-3); Chapters 8, 11, 12, and 20 (OPNAVINST 4790.2 VOL-5) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapters 1, 4, and 5 (OPNAVINST 8600.2 VOL-1); Chapters 1, 6, and 8 (OPNAVINST 8600.2 VOL-2) Inspection Requirements for Receipt, Segregation, Stowage & Issue of Navy & Marine Corp Conventional Ammunition, Chapters 1-6 (NAVSEA TW010-AC-ORD-010)
Exam Expectations. These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about monitoring test equipment repair and calibration, preparing Conventional Ordnance Deficiency Reports (CODR), reviewing tool inventories, and performing Collateral Duty Inspections (CDI). The questions may be of a general nature or specific to a type of Quality Assurance Tasks.

General AO Skill Area	Technical Administration
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain ordnance records
Knowledge you should have to perform this skill:	 Preparing ammunition requisition documents Preparing ammunition turn in documents Preparing material condition tags for Ready For Issue (RFI) and Non-Ready For Issue (NON-RFI) assets Operating Fleet Optical Scanning Ammunition Marking Systems (FOSAMS)
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapter 17 (NAVEDTRA 12309) Ammunition Afloat, Chapters 6 and 7 (NAVSEA OP 4) Ammunition Ashore, Chapters 1-3, 7, 10, 11, and 13 (NAVSEA OP 5 VOL-1) Ammunition Ashore Advance Bases, Chapters 1-3, 5, and 6 (NAVSEA OP 5 VOL-3) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapters 1, 4, and 5 (OPNAVINST 8600.2 VOL-1); Chapters 1-8 (OPNAVINST 8600.2 VOL-2); Appendices D, J, and H (OPNAVINST 8600.2 VOL-3) Inspection Requirements for Receipt, Segregation, Stowage & Issue of Navy & Marine Corp Conventional Ammunition, Chapters 1-6 (NAVSEA TW010-AC-ORD-010)

You can expect questions about preparing ammunition requisition documents, ammunition turn in documents, preparing material condition tags for Ready For Issue (RFI) and Non-Ready For Issue (NON-RFI) assets, and operating Fleet Optical Scanning Ammunition Marking Systems. The questions may be of a general nature or specific to a type of technical administration procedure.

General AO Skill Area	Management and Supervision
A <i>skill</i> you are expected to perform from the General Skill Area above:	Load and unload ordnance
Knowledge you should have to perform this skill:	 Conducting safety inspections prior to loading and unloading ordnance Directing aircraft ordnance loading and unloading operations
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapters 10, 14, and 15 (NAVEDTRA 12309) Airborne Weapons/Stores Loading Manual F/A-18A/B/C/D, Chapters 1-32 (A1-F18AE-LWS-000) Airborne Weapons/Stores Loading Manual SH-60B, Chapters 1-13 (A1-H60BB-LWS-000) CV NATOPS Manual, Chapter 6 (NAVAIR 00-80T-105) LHA/LPH/LHD NATOPS Manual, Chapter 6 (NAVAIR 00-80T-106) Armament Systems F-14A, B, A/C, Work Packages 001-109 (NAVAIR 01-F14AAA-2-4-13) Airborne Weapons/Stores Loading Manual F-14A/B/D, Chapters 1-18 (NAVAIR 01-F14AAA-75) Airborne Weapons/Stores Loading Manual S-3, Chapters 1-25 (NAVAIR 01-S3AAA-75) Airborne Weapons/Stores Loading Manual P-3, Chapters 1-21 (NAVAIR 01-75PA-75) Airborne Weapons/Stores Loading Manual A-6 Series, EA-6, KA-6, Chapters 1-29 (NAVAIR 01-85AD-75)

	 USN Ordnance Safety Precautions, Chapter 1-3 (NAVSEA OP 3347) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapter 4 (OPNAVINST 8600.2 VOL-1); Chapters 3 and 6 (OPNAVINST 8600.2 VOL-2)
Exam Expectations. These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about conducting safety inspections prior to loading and unloading ordnance, and directing aircraft weapons and ordnance loading and unloading operations. The questions may be of a general nature or specific to a management or supervision procedure.

Part 3

General AO Skill Area	Quality Assurance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor the Corrosion Prevention and Control Program
Knowledge you should have to perform this skill:	 Requirements of the Corrosion Prevention and Control Program Definition of corrosion Corrosion theory Causes of corrosion Types and identification of corrosion Metals affected by corrosion Equipment used for corrosion prevention and treatment Methods for preventing corrosion Methods for removing corrosion Methods for treating corrosion Preferred coatings for support equipment Application methods for surface coatings Requirements and procedures for cleaning and inspecting for corrosion Procedures for documenting corrosion prevention and treatment
References you should study to gain the knowledge you need to perform this skill:	 Aviation Maintenance Ratings, Chapter 4, (NAVEDTRA 12017) Aircraft Weapons Systems Cleaning and Corrosion Control, Chapters 1-9 and Appendices A-E (NAVAIR 01-1A-509) Avionics Cleaning & Corrosion Prevention/Control, Chapters 1-10 and Appendices A-D (NAVAIR 16-1-540) Support Equipment Cleaning, Preservation, and Corrosion Control, Sections 1-8 and Appendices A and B (NAVAIR 17-1-125)

	• The Naval Aviation Maintenance Program (NAMP), Chapters 12 and 16 (OPNAVINST 4790.2 VOL-1); Chapters 3 and 9 (OPNAVINST 4790.2 VOL-3); Chapters 14 and 18 (OPNAVINST 4790.2 VOL-5)
Exam Expectations. These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about monitoring the Corrosion Prevention and Control Program. These questions will include all aspects of the program, including, but not limited to, program requirements, corrosion identification, corrosion prevention, corrosion removal, corrosion treatment, corrosion reports, and documentation of corrosion prevention and treatment. The questions may be of a general nature or specific to a type of corrosion prevention and or corrosion control program procedure.

General AO Skill Area	Quality Assurance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor the Support Equipment Operator Training and Licensing Program
Knowledge you should have to perform this skill:	 Requirements and responsibilities of the Support Equipment Operator Training and Licensing Program Support equipment that requires a license Source of training courses for support equipment licensing Qualifications for explosive drivers Handling and transporting hazardous material and ordnance items Qualification requirements for a support equipment licensing instructor Driver's license requirements and extension polices for personnel licensed to operate self-propelled support equipment Procedures for completing the SE license Certification Procedures for completing the USN aviation Support Equipment Operator's license
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapter 12 (NAVEDTRA 12309) Aviation Maintenance Ratings, Chapter 5, (NAVEDTRA 12017) Ammunition Ashore, Chapter 1 (NAVSEA OP 5 VOL-1) Motor Vehicle Driver's Handbook Ammunition, Explosives and Related Hazardous Materials, Chapters 1-8 (NAVSEA OP 2239)

	 The Naval Aviation Maintenance Program (NAMP), Chapter 17 and Appendix B (OPNAVINST 4790.2 VOL-5) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapter 6 (OPNAVINST 8600.2 VOL-2) Navy Transportation Safety Handbook for Ammunition, Explosives and Related Hazardous Material, Chapter 1-9 (NAVSEA SW020-AG-SAF-010)
Exam Expectations. These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about monitoring the Support Equipment Operator Training and Licensing Program. These questions will include all aspects of the program, including, but not limited to, program requirements, equipment license requirements, training courses, instructor qualifications, qualifications for explosive drivers, handling and transporting hazardous material, ordnance items, and licensing form completion. The questions may be of a general nature or specific to a type of Support Equipment Operator Training and licensing Program.

General AO Skill Area	Quality Assurance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor the Foreign Object Damage (FOD) Prevention Program
Knowledge you should have to perform this skill:	 Requirements of the Foreign Object Damage (FOD) Prevention Program Responsibilities for FOD prevention Causes of FOD Procedures for preventing FOD Procedures for reporting incidents resulting from FOD
References you should study to gain the knowledge you need to perform this skill:	 Aviation Maintenance Ratings, Chapter 5 (NAVEDTRA 12017) The Naval Aviation Maintenance Program (NAMP), Chapters 14, 17, and 21 (OPNAVINST 4790.2 VOL-1); Chapters 12 and 13 (OPNAVINST 4790.2 VOL-5)
Exam Expectations. These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about the Foreign Object Damage Prevention Program. These questions will include all aspects of the program, including, but not limited to, program requirements, responsibilities, FOD cause, FOD prevention, and reporting procedures. The questions may be of a general nature or specific to the FOD prevention program.

General AO Skill Area	Quality Assurance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor the Tool Control Program
Knowledge you should have to perform this skill:	 Purpose of the Tool Control Program Tool Control Program procedures and responsibilities Design requirements for tool containers Identification and use of tools Tool container inventory and shortage list requirements Tool marking requirements and procedures for tools that are too small to mark Procedures and requirements for physical inventory and inspection of tool containers Tool control requirements for contractors Checking magnetic and static electrical stability of tools Procedures for reporting and investigating missing and broken tools Procedures for reporting defective tools Reviewing broken, missing and defective tool reports
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapters 3, 10, 11, 13, and 14 (NAVEDTRA 12309) Aviation Maintenance Ratings, Chapter 5 (NAVEDTRA 12017) The Naval Aviation Maintenance Program (NAMP), Chapter 15 (OPNAVINST 4790.2 VOL-1); Chapter 13 (OPNAVINST 4790.2 VOL-5)

	• The Naval Airborne Weapons Maintenance Program (NAWMP), Chapters 1, 4, and 5 (OPNAVINST 8600.2 VOL-1); Chapters 1, 6, and 8 (OPNAVINST 8600.2 VOL-2)
Exam Expectations. These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about the Tool Control Program; including purpose; procedures; responsibilities; tool container design; use of tools; inventory lists; shortage lists; marking requirements; physical tool container inventories; contractors; broken, missing, and defective tool reporting; and investigations. The questions may be of a general nature or specific to the Tool Control Program procedure.

General AO Skill Area	Quality Assurance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor, use, store, and dispose of hazardous materials
Knowledge you should have to perform this skill:	 Use of the Hazardous Materials User's Guide (HMUG) Use of Material Safety Data Sheets (MSDS) Safety precautions for working with hazardous materials Personal protective equipment (PPE) used when working with hazardous materials Use of hazardous material inventories Storage procedures for hazardous materials Identification of hazardous material containers Cleaning and inspection procedures for hazardous material containers Hazardous material disposal procedures
References you should study to gain the knowledge you need to perform this skill:	 The Naval Aviation Maintenance Program (NAMP), Chapter 20 (OPNAVINST 4790.2 VOL-5) Ships 3-M Maintenance, Material, and Management, Chapter 1 (OPNAVINST 4790.4) Navy Occupational Safety & Health (NAVOSH) for Forces Afloat, Chapter B3 (OPNAVINST 5100.19 VOL 1); Chapter C23 (OPNAVINST 5100.19 VOL2) Navy Occupational Safety and Health Program Manual, Chapter 7 (OPNAVINST 5100.23) Hazardous Materials User's Guide, Introduction, Groups 1-15 and 19 The Naval Airborne Weapons Maintenance Program (NAWMP), Chapter 8 (OPNAVINST 8600.2 VOL-2)

You can expect questions about the use, storage, monitoring, and disposal of hazardous material, including MSDS, safety precautions, PPE, inventories, and storage containers. The questions may be of a general nature or specific to a type of hazardous material procedure.

General AO Skill Area	Quality Assurance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Monitor Hazards of Electromagnetic Radiation to Ordnance (HERO) Programs
Knowledge you should have to perform this skill:	 HERO classification standards HERO hazards Uses of the Emission Control (EMCON) bill Operating procedures and precautions to prevent premature initiation of Electroexplosive Devices (EED's) in ordnance from Electromagnetic Radiation (EMR) Conducting Radiation Hazard (RADHAZ) safety inspections Setting HERO conditions
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapter 11 (NAVEDTRA 12309) Ammunition Afloat, Chapter 2 (NAVSEA OP 4) Ammunition Ashore, Chapters 2, 5, 7, and 8 (NAVSEA OP 5 VOL-1) Ordnance Safety Precautions their Origin and Necessity, Chapter 1 (NAVORD OP 1014) Electromagnetic Radiation Hazards, Chapters 1-8 (NAVSEA OP 3565/NAVAIR 16-1-529 VOL-1) Electromagnetic Radiation Hazards, Chapters 1-6 (NAVSEA OP 3565/NAVAIR 16-1-529 VOL-2 PART-1) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapter 6 (OPNAVINST 8600.2 VOL-2)

You can expect questions about recognizing HERO classification standards, identifying HERO hazards, the usage of the emission control (EMCON) bill, operating procedures and precautions to prevent premature initiation of electroexplosive devices (EED's) in ordnance from Electromagnetic Radiation (EMR), conducting Radiation Hazard (RADHAZ) safety inspections and setting HERO conditions. The questions may be of a general nature or specific to a type of Hazard of Electromagnetic Radiation to Ordnance.

General AO Skill Area	Quality Assurance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Manage the Support Equipment Misuse and Abuse Program
Knowledge you should have to perform this skill:	 Requirements for submitting Support Equipment Misuse and Abuse reports Tracking requirements for Support Equipment Misuse and Abuse reports Procedures for submitting and routing a Support Equipment Misuse and Abuse report Procedures for investigating a Support Equipment Misuse and Abuse report
References you should study to gain the knowledge you need to perform this skill:	 Aviation Maintenance Ratings, Chapters 5 and 6 (NAVEDTRA 12017) The Naval Aviation Maintenance Program (NAMP), Chapters 14, 15, and Appendix B (OPNAVINST 4790.2 VOL-1); Chapter 17 and Appendix B (OPNAVINST 4790.2 VOL-5)
Exam Expectations. These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about the Support Equipment Misuse and Abuse Program, including reporting, tracking, routing, and investigating. The questions may be of a general nature or specific to a Support Equipment Misuse and Abuse Program procedure.

General AO Skill Area	Quality Assurance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Manage the Naval Aviation Maintenance Discrepancy Reporting Program (NAMDRP)
Knowledge you should have to perform this skill:	 Requirements of the NAMDRP When a NAMDRP report is required Responsibilities for submitting NAMDRP reports Procedures for submitting NAMDRP reports Types of NAMDRP reports Forms used for NAMDRP reports Methods for submitting NAMDRP reports Timelines for submitting NAMDRP reports Tracking procedures for NAMDRP reports
References you should study to gain the knowledge you need to perform this skill:	 The Naval Aviation Maintenance Program (NAMP), Chapters 6 and 14 (OPNAVINST 4790.2 VOL-1); Chapter 10 (OPNAVINST 4790.2 VOL-5) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapter 4 (OPNAVINST 8600.2 VOL-1)
Exam Expectations. These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about the Naval Aviation Maintenance Discrepancy Reporting Program. These questions will include all aspects of the program, including, but not limited to, program requirements, submitting reports, tracking reports, forms, report types, and timelines. The questions may be of a general nature or specific to a type of NAMDRP procedure.

General AO Skill Area	Quality Assurance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Manage the Departmental Safety Program
Knowledge you should have to perform this skill:	 Requirements of the Departmental Safety Program Responsibilities of the Quality Assurance division in the safety program Responsibilities of the work center supervisors in the safety program Responsibilities of the chain of command in the safety program Identification of safety hazards, unsafe conditions, and unsafe work practices Performing magazine electrical ground system inspections Training required to support the safety program Personal protective equipment (PPE) requirements Safety poster requirements Procedures for preventing accidents Procedures for reporting accidents
References you should study to gain the knowledge you need to perform this skill:	 Aviation Maintenance Ratings, Chapters 2, 4, and 5 (NAVEDTRA 12017) The Naval Aviation Maintenance Program (NAMP), Chapters 2, 4, 11, and 14-16 (OPNAVINST 4790.2 VOL-1); Chapters 2, 5-8, 10, 13, 17, 19, and 20 (OPNAVINST 4790.2 VOL-5) Navy Occupational Safety & Health (NAVOSH) for Forces Afloat, Chapters A and B (OPNAVINST 5100.19 VOL-1); Chapter C (OPNAVINST 5100.19 VOL-2)

	 Navy Occupational Safety and Health Program Manual, Chapters 1-12, 14-16, 18-21, 23, and 24 (OPNAVINST 5100.23) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapter 4 (OPNAVINST 8600.2 VOL-1); Chapters 1, 4, and 6 (OPNAVINST 8600.2 VOL-2)
Exam Expectations. These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about the Departmental Safety Program. These questions will include all aspects of the program, including, but not limited to, program requirements, responsibilities, hazards, unsafe conditions and practices, safety training, safety inspections, PPE, safety posters, accident prevention, and accident reporting. The questions may be of a general nature or specific to Safety.

General AO <i>Skill Area</i>	Quality Assurance
A <i>skill</i> you are expected to perform from the General Skill Area above:	Perform quality assurance (QA) audits
Knowledge you should have to perform this skill:	 Requirements of the Quality Assurance Audit Program Responsibilities under the Quality Assurance Audit Program Audit types Operation of programs audited by QA Performing Quality Assurance Inspections Conducting Work Center Audits Performing trend analysis Use of the Computerized Self-Evaluation Checklist (CSEC) Information contained in the CSEC Procedures for performing QA audits
References you should study to gain the knowledge you need to perform this skill:	 Aviation Maintenance Ratings, Chapter 6 (NAVEDTRA 12017) The Naval Aviation Maintenance Program (NAMP), Chapter 14 (OPNAVINST 4790.2 VOL-1); Chapter 8 (OPNAVINST 4790.2 VOL-5)
Exam Expectations. These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about performing quality assurance audits. These questions will include all aspects of the Quality Assurance Audit Program, including, but not limited to, program requirements, responsibilities, audit types, audited programs, and CSEC. The questions may be of a general nature or specific to a type of audit procedure.

General AO Skill Area	Technical Administration
A <i>skill</i> you are expected to perform from the General Skill Area above:	Prepare ammunition reports
Knowledge you should have to perform this skill:	 Preparing ammunition shipping documents Preparing ammunition transaction reports Preparing ordnance expenditure reports Computing ammunition net explosive weight Constructing ammunition allowance list Examining Notices of Ammunition Reclassification (NAR) Disposing of overage ordnance and munitions
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapters 12 and 17 (NAVEDTRA 12309) Ammunition Afloat, Chapters 6 and 7 (NAVSEA OP 4) Ammunition Ashore, Chapters 1-3, 7, 10, 11, and 13 (NAVSEA OP 5 VOL-1) Ammunition Ashore Advance Bases, Chapters 1-3, 5, and 6 (NAVSEA OP 5 VOL-3) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapters 1, 4, and 5 (OPNAVINST 8600.2 VOL-1); Chapters 1-8 (OPNAVINST 8600.2 VOL-2); Appendices D, J, and H (OPNAVINST 8600.2 VOL-3) Inspection Requirements for Receipt, Segregation, Stowage & Issue of Navy & Marine Corp Conventional Ammunition, Chapters 1-6 (NAVSEA TW010-AC-ORD-010)

You can expect questions about preparing ammunition shipping documents, ammunition transaction and ordnance expenditure reports. You can also expect questions about computing ammunition net explosive weight, constructing ammunition allowance list, examining notices of ammunition reclassification, and disposing of overage ordnance and munitions. The questions may be of a general nature or specific to a type of ammunition report.

General AO Skill Area	Management
A <i>skill</i> you are expected to perform from the General Skill Area above:	Coordinate weapons assembly and configure functions
Knowledge you should have to perform this skill:	 Evaluating daily weapons load plan Coordinating weapons assembly functions Configuring weapons for underway vertical and connected replenishment Preparing aircraft status reports Monitoring arming and dearming crews
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapters 1-17 (NAVEDTRA 12309) Aviation Maintenance Ratings, Chapter 2 (NAVEDTRA 12017) Ammunition Afloat, Chapters 1-7 (NAVSEA OP 4) Ammunition Ashore, Chapters 1-13 and Appendices A-G (NAVSEA OP 5 VOL-1) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapter 1-4 and 6 (OPNAVINST 8600.2 VOL-2)
Exam Expectations. These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about evaluating daily weapons load plan, coordinating weapons assembly functions, configuring weapons for underway vertical and connected replenishment, preparing aircraft status reports, and monitoring arming and dearming crews. The questions may be of a general nature or specific to a type weapons assemble or configuration function.

General AO Skill Area	Management
A <i>skill</i> you are expected to perform from the General Skill Area above:	Maintain explosives handling personnel qualification and certification programs
Knowledge you should have to perform this skill:	 Monitoring explosives handling personnel qualification and certification programs Conducting explosives handling personnel qualification and certification boards
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapter 11 (NAVEDTRA 12309) Explosives Handling Personnel Qualification & Certification (QUAL/CERT) Program, All pages (NAVSURFLANTINST 8023.4/COMNAVSURFPA CINST 8023.5) Ammunition Ashore, Chapters 1 and 2 (NAVSEA OP 5 VOL-1) Ammunition Ashore Advance Bases, Chapters 1-7 and Appendices A and B (NAVSEA OP 5 VOL-3) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapter 6 (OPNAVINST 8600.2 VOL-1), Chapters 1-3 and 5-8 (OPNAVINST 8600.2 VOL-2)
Exam Expectations. These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about, monitoring and conducting explosives handling personnel qualification and certification boards. The questions may be of a general nature or specific to the explosives handling personnel qualification or certification program.

Part 4

General AO Skill Area	Technical Administration
A <i>skill</i> you are expected to perform from the General Skill Area above:	Review the Weapons Delivery Data Section of Naval Aircraft Flight Record Subsystems (NAVFLIRS)
Knowledge you should have to perform this skill:	 Purpose of weapons delivery data section of NAVFLIRS Responsibilities for maintaining the NAVFLIRS Requirements for NAVFLIRS review Procedures for NAVFLIRS review
References you should study to gain the knowledge you need to perform this skill:	 The Naval Aviation Maintenance Program (NAMP), Chapters 10, 12, 13, and Appendices A and B (OPNAVINST 4790.2 VOL-1); Chapters 2, 3, and Appendices A and B (OPNAVINST 4790.2 VOL-3); Chapters 3, 5-8, and Appendix A (OPNAVINST 4790.2 VOL-4) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapter 5 (OPNAVINST 8600.2 VOL-1)
Exam Expectations. These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about the purpose of weapons delivery data section of NAVFLIRS, responsibilities for maintaining the NAVFLIRS and the requirements and procedures for NAVFLIRS reviewing. The questions may be of a general nature or specific to NAVFLIRS.

General AO <i>Skill Area</i>	Technical Administration
A <i>skill</i> you are expected to perform from the General Skill Area above:	Prepare Explosive Safety Waiver and Exemption Requests
Knowledge you should have to perform this skill:	 Purpose of a Explosive Safety Waiver and Exemption Request Responsibilities for maintaining an explosive safety waiver and exemption request Requirements for an explosive safety waiver and exemption request Procedures for reviewing the explosive safety waiver and exemption request
References you should study to gain the knowledge you need to perform this skill:	 Ammunition Ashore, Chapter 1 (NAVSEA OP 5 VOL-1) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapter 6 (OPNAVINST 8600.2 VOL-2)
Exam Expectations. These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about preparing an explosive safety waiver and exemption request, including the purpose of an explosive safety waiver and exemption request, and responsibilities, requirements, and procedures for reviewing the explosive safety waiver and exemption request. The questions may be of a general nature or specific to a type of explosive safety waiver and exemption request.

General AO Skill Area	Management
A <i>skill</i> you are expected to perform from the General Skill Area above:	Conduct Aircraft Accident Investigations
Knowledge you should have to perform this skill:	 Requirements for submitting accident/incident/mishap reports Responsibilities of accident/incident investigators Terms to be used on mishap reports Mishap and injury classifications Procedures for submitting accident/incident/mishap reports Procedures for investigating accident/incident/mishap reports
References you should study to gain the knowledge you need to perform this skill:	 The Naval Aviation Maintenance Program (NAMP), Chapters 2, 3, and 11 (OPNAVINST 4790.2 VOL-2), Chapters 10 and 12 (OPNAVINST 4790.2 VOL-5) Navy Occupational Safety & Health (NAVOSH) for Forces Afloat, Chapter A6 (OPNAVINST 5100.19) Navy Occupational Safety and Health Program Manual, Chapter 14 (OPNAVINST 5100.23) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapters 4 and 5 (OPNAVINST 8600.2 VOL-1); Chapter 8 (OPNAVINST 8600.2 VOL-2)

You can expect questions about incident, accident, and mishap reports and investigations. These questions will include all aspects of mishap reporting and investigating, including, but not limited to, requirements for submitting reports, investigator responsibilities, report terms, procedures for submitting reports, and investigation procedures. The questions may be of a general nature or specific to a type of incident, accident, and mishap report and investigation.

General AO Skill Area	Management
A <i>skill</i> you are expected to perform from the General Skill Area above:	Managing a work center
Knowledge you should have to perform this skill:	 Screening service records to verify data for ordnance handling teams Interviewing newly reported personnel for ordnance teams Assigning job priorities to work centers Evaluating equipment operational capabilities (EOC)
References you should study to gain the knowledge you need to perform this skill:	 Aviation Ordnanceman 3, 2, & 1, Chapters 1-17 (NAVEDTRA 12309) Aviation Maintenance Ratings, Chapters 1-7 (NAVEDTRA 12017) The Naval Aviation Maintenance Program (NAMP), Chapters 1, 4, 6, and Appendices A and C (OPNAVINST 4790.2 VOL-3) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapters 1 and 6 (OPNAVINST 8600.2 VOL-1); Chapters 6 and 8 (OPNAVINST 8600.2 VOL-2)
Exam Expectations. These are subject areas you should know to help you answer exam questions correctly:	You can expect questions about managing a work center, including screening service records to verify data for ordnance handling teams, interviewing newly reported personnel for ordnance teams, assigning job priorities to work centers, and evaluating equipment operational capabilities. The questions may be of a general nature or specific to managing a work center.

General AO Skill Area	Management
A <i>skill</i> you are expected to perform from the General Skill Area above:	Identify Arms/Ammunition/Explosive (AAE) Security Requirements
Knowledge you should have to perform this skill:	 Purpose of Arms/Ammunition/Explosive Security Requirements Responsibilities for maintaining Arms/Ammunition/Explosive Security Requirements Requirements for reviewing Arms/Ammunition/Explosive Security Requirements
References you should study to gain the knowledge you need to perform this skill:	 Ammunition Afloat, Chapters 1 and 3 (NAVSEA OP 4) Ammunition Ashore, Chapter 2 (NAVSEA OP 5 VOL-1) The Naval Aviation Maintenance Program (NAMP), Chapters 9, 10, and Appendix A (OPNAVINST 4790.2 VOL-1) Physical Security Instruction for Conventional Arms, Ammunition & Explosives (AA&E), Chapters 1-7 and Appendices A-I (OPNAVINST 5530.13) Physical Security & Lost Prevention, Chapters 1-12 and Appendices I-XVII (OPNAVINST 5530.14B) The Naval Airborne Weapons Maintenance Program (NAWMP), Chapter 6 (OPNAVINST 8600.2 VOL-2)

You can expect questions about identifying arms/ammunition/explosive security requirements, including the purpose of AAE, responsibilities, and requirements for reviewing AAE security. The questions may be of a general nature or specific to arms, ammunition, and explosive security requirements.

Appendix A

References Used in This Advancement Handbook

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
AO3	NAVEDTRA 12309	Aviation Ordnanceman 3, 2, & 1	Chapters 1-17 and Appendix I	Note 1
	NAVEDTRA 12017	Aviation Maintenance Ratings	Chapters 4 and 5	Note 1
	AW-382AC-750-010	Vertical Ejector Rack Assembly BRU-33/A, A/A	Work Packages 001-031	Note 1
	AW-394AC-750-000	Aircraft Guided Missile Launcher LAU-115/A, A/A, B/A, C/A	Work Packages 001-014	Note 1
	A1-F18AC-750-300	Gun System F/A-18A/B/C/D	Work Packages 001-030	Note 1
	A1-F18AE-LWS-000	Airborne Weapons/Stores Loading Manual F/A-18A/B/C/D	Chapters 1-5, 8-21, 23-27, 29, and 30	Note 1
	A1-H60BB-LWS-000	Airborne Weapons/Stores Loading Manual SH-60B	Chapters 1-6 and 10-13	Note 1
	NAVAIR-00-80T-103	NATOPS Conventional Weapons Handling Procedures Manual Ashore	Chapters 1-6	Note 1
	NAVAIR 00-80T-105	CV NATOPS Manual	Chapter 6	Note 1
	NAVAIR 00-80T-106	LHA/LPH/LHD NATOPS Manual	Chapter 6	Note 1
	NAVAIR 01-AGM65E/F-1-2	AGM-65F (IR) & 65E (Laser) Maverick Missiles on F/A 18 A/C	Pages 1-62	Note 1
	NAVAIR 01-AIM9-2	AIM-9H/M Guided Missile and Training Missile	Work Packages 001-011	Note 1
	NAVAIR 01-F14AAA-2-4-13	Armament Systems F-14A, B, A/C	Work Packages 001-109	Note 1
	NAVAIR 01-F14AAA-75	Airborne Weapons/Stores Loading Manual F-14A/B/D	Chapters 1-11 and 13-18	Note 1
	NAVAIR 01-S3AAA-75	Airborne Weapons/Stores Loading Manual S-3	Chapters 1-5, 7, 9-14, 17-21, and 23	Note 1
	NAVAIR 01-1A-75	Airborne Weapons & Associated Equipment Consumable Material Applications & Hazardous Material Authorized Use List	Work Packages 001-012	Note 1
	NAVAIR 01-1A-509	Aircraft Weapons Systems Cleaning and Corrosion Control	Chapters 1-9 and Appendices A-E	Note 1
	NAVAIR 01-15MGA-3-2	Walleye I Guided Weapons Mk 21 & 29 All Mods	Work Packages 001-022	Note 1
	NAVAIR 01-15MGB-3-2	Walleye II Guided Weapons Mk 5, 23, 30 All Mods	Work Packages 001-013	Note 1

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
AO3 (Cont)	NAVAIR 01-15MGD-1	Laser Guided Bomb GBU 12C/B, D/B, 16A/B, B/B, 10D/B, E/B	Work Packages 001-015	Note 1
	NAVAIR 01-75PA-75	Airborne Weapons/Stores Loading Manual P-3	Chapters 1-5, 9-19, and 21	Note 1
	NAVAIR 01-85AD-75	Airborne Weapons/Stores Loading Manual A-6 Series, EA-6, KA-6	Chapters 1-15, 17-23, 25, and 29	Note 1
	NAVAIR 11-1-119	Ammunition for 20mm/25mm A/C Guns	Chapters 1-10	Note 1
	NAVAIR 11-1F-2	Description & Characteristic Airborne Bomb & Rocket Fuze Manual	Chapters 1-5	Note 1
	NAVAIR 11-5-603	(IMER) BRU 41A & (ITER) BRU 42/A	Chapters 1-9	Note 1
	NAVAIR 11-5A-17	A/C GP Bombs, Fire Bombs, Practice Bombs & Components	Chapters 1-8	Note 1
	NAVAIR 11-5A-33	Dispenser and Mine A/C Weapons CBU 78/B (Gator)	Work Packages 001-006	Note 1
	NAVAIR 11-5C-23	Bomb Rack BRU 12/A	Chapters 1-9	Note 1
	NAVAIR 11-5E-18	Bomb Rack BRU 14/A, 15/A	Chapters 1-9	Note 1
	NAVAIR 11-10C-20	Bomb Ejector Rack BRU 10/B including BRU 10/A, 11/A/B	Chapters 1-10	Note 1
	NAVAIR 11-10C-24	Bomb Ejector Rack BRU 10/B including BRU 10A/B through 11A/A	Chapters 1-10	Note 1
	NAVAIR 11-75A-54	A/C Guided Missile Launcher LAU 7/A Series	Work Packages 001-015	Note 1
	NAVAIR 11-75A-57	MER/TER	Chapters 1-9	Note 1
	NAVAIR 11-75A-61	2.75-inch Airborne Rocket Launchers LAU 61A/A, B/A, C/A, 68B/A, D/A	Chapters 1-8	Note 1
	NAVAIR 11-75A-63	5.0-inch Airborne Rocket Launchers LAU 10 Series	Chapters 1-10	Note 1
	NAVAIR 11-75A-78	A/C Guided Missile Launcher LAU-118 (v) 1/A	Work Packages 001-011	Note 1
	NAVAIR 11-75A-79	A/C Guided Missile Launcher LAU-117 (a) 2/A	Work Packages 001-009	Note 1
	NAVAIR 11-75AA-48	Dispenser SUU 25F/A	Chapters 1-11	Note 1
	NAVAIR 11-85-5	Airborne Rockets	Chapters 1-7	Note 1
	NAVAIR 11-95M61A.1	M61A1 20mm Automatic Gun	Chapters 1-7	Note 1
	NAVAIR 11-95M61A1.2	Ammunition Handling and Gun Drive System	Work Packages 001-018	Note 1
	NAVAIR 11-100-1.1	General Use Cartridges (CADS)	Chapters 1-13	Note 1

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
AO3 (Cont)	NAVAIR 11-100-1.3	General Use Cartridges (CADS)	Chapters 1-5	Note 1
	NAVAIR 11-120A1.1 VOL-1	Airborne Weapons Packaging/Handling/Stowa ge Shipboard	Chapters 1-5	Note 1
	NAVAIR 11-120A1.2 VOL-2	Airborne Weapons Packaging/Handling/Stowa ge Shipboard	Chapters 6-10	Note 1
	NAVAIR 11-140-5	Airborne Weapons Assembly Mk 80/BLU Series, Mk 77 Fire, Practice Bombs	Chapters 1-11	Note 1
	NAVAIR 11-140-9	Airborne Weapons Assembly Cluster Bomb Units	Chapters 1-17	Note 1
	NAVAIR 11-140-10	Airborne Weapons Assembly Paveway II, III, GBU	Chapters 1-8	Note 1
	NAVAIR 11-140-24	Airborne Weapons Support Equipment Description & Characteristics	Chapters 1-30	Note 1
	NAVAIR 11-140-25	Airborne Weapons Support Equipment Configuration Manual	Chapters 1-18	Note 1
	NAVAIR 16-1-540	Avionics Cleaning & Corrosion Prevention/Control	Chapters 1-10	Note 1
	NAVAIR 19-1-125	Linkless Ammunition Loading System: Conveyor MHU-130, Loader Ammo Transporter MHU-130, Drum Unload Assembly MHU-132, Drum Load Assembly MHU-133	Chapters 1-6	Note 1
	NAVAIR 19-1-267	Linkless Ammunition Loading System A/E32K-7	Work Packages 001-004	Note 1
	NAVAIR 19-1-269	Linkless Ammunition Loading System A/E32K-7	Work Packages 001-012	Note 1
	NAVAIR 19-15BC-12	Bomb Skid Assembly Aero 12C	Work Package 001	Note 1
	NAVAIR 19-25E-51	Munitions Trailer Aero 51B, D	Work Packages 001-008	Note 1
	NAVAIR 19-25E-61	Small Munitions Trailer MHU 126/M, A/M	Work Packages 001-010	Note 1
	NAVAIR 19-25E-510	Munitions Trailer MHU 185/M	Work Packages 001-013	Note 1
	NAVAIR 28-10A-501	Aerial Tow Targets & Associated Equipment	Chapters 1-10	Note 1

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
AO3 (Cont)	NSTM CHAPTER 700	Shipboard Ammunition Handling & Stowage Chapter 700 S9086-XG-STM-010	All Pages	Note 1
	NAVSEA OP 4	Ammunition Afloat	Chapters 1-7	Note 1
	NAVSEA OP 5 VOL-1	Ammunition Ashore	Chapters 1-13	Note 1
	NAVSEA OP 5 VOL-3	Ammunition Ashore Advance Bases	Chapters 1-7	Note 1
	NAVSEA OP 2173 VOL-1	Approved Handling Equipment for Weapons & Explosives	Chapters 1-28	Note 1
	NAVSEA OP 2173 VOL-2	Approved Handling Equipment for Weapons & Explosives	Chapters 29-54	Note 1
	NAVSEA OP 2239	Motor Vehicle Driver's Handbook Ammunition, Explosives and Related Hazardous Materials	Chapters 1-8	Note 1
	NAVSEA OP 3206 VOL-1	Handling and Stowage of Naval Ordnance Aboard Naval Ships	Chapters 1-5	Note 1
	NAVSEA OP 3565/NAVAIR 16-1-529 VOL-1	Electromagnetic Radiation Hazards	Chapters 1-8	Note 1
	NAVSEA OP 3565/ NAVAIR 16-1-529 VOL-2 PART-1	Electromagnetic Radiation Hazards	Chapters 1-6	Note 1
	NAVSEA OP 3681	Motor Vehicle & Railcar Shipping Inspector's Manual	Chapters 1-5	Note 1
	NAVSEA OP 4550	Handling & Stowage of Amphibious Assault Ammunition aboard Amphibious Ships	Chapters 1-6	Note 1
	OPNAVINST 4790.2 VOL-1	The Naval Aviation Maintenance Program (NAMP)	Chapters 2, 4, 5, 10, 12, 14, and 16	Note 2
	OPNAVINST 4790.2 VOL-3	The Naval Aviation Maintenance Program (NAMP)	Chapters 8 and 11	Note 2
	OPNAVINST 4790.2 VOL-4	The Naval Aviation Maintenance Program (NAMP)	Chapter 2	Note 2
	OPNAVINST 4790.2 VOL-5	The Naval Aviation Maintenance Program (NAMP)	Chapters 8, 10-12, 14, 15, 18, and 20	Note 2
	OPNAVINST 4790.4	Ships 3-M Maintenance, Material, and Management	Chapters 1-7	Note 2
	OPNAVINST 5100.19 VOL 1	Navy Occupational Safety & Health (NAVOSH) for Forces Afloat	Chapters A and B	Note 2

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
AO3 (Cont)	OPNAVINST 8600.2 VOL-1	The Naval Airborne Weapons Maintenance Program (NAWMP)	Chapters 1-5	Note 2
	OPNAVINST 8600.2 VOL-2	The Naval Airborne Weapons Maintenance Program (NAWMP)	Chapters 1-8	Note 2
	OPNAVINST 8600.2 VOL-3	The Naval Airborne Weapons Maintenance Program (NAWMP)	Appendices A-L	Note 2
	NAVSEA SG420-AP-MMA-010	Periodic Testing Arrangement for Ordnance Handling Equipment	Chapters 1-4	Note 1
	SG420-B5-WHS-010	Handling & Stowage of Air- Launched Weapons Aboard Amphibious Ships	Chapters 1-6	Note 1
	SG818-LL-MMA-020	Maintenance Manual for 8,000 pound Weapons Elevators Lower Stage	Chapters 1-7	Note 1
	SG818-LF-MMA-020	Maintenance Manual for 10,500 pound Weapons Elevators Lower Stage	Chapters 1-7	Note 1
	NAVSEA SW020-AG-SAF-010	Navy Transportation Safety Handbook for Ammunition, Explosives and Related Hazardous Material	Chapters 1-9	Note 1
	NAVSEA SW023-AH-WHM-010	Handling Ammunition & Explosives with Industrial Materials Handling Equipment (MHE)	Chapters 1-6	Note 1
	NAVSEA SW050-AB-MMA-010/ NAVAIR 11-15-7 VOL-1	Pyrotechnic, Screening, Marking & Countermeasure Devices	Chapters 1-14	Note 1
	S9522-AA-HBK-010	Magazine Sprinkling Systems	Chapters 1-5	Note 1
	NAVSEA TW010-AC-ORD-010	Inspection Requirements for Receipt, Segregation Stowage & Issue of Navy & Marine Corp Conventional Ammunition	Chapters 1-6	Note 1
AO2	NAVEDTRA 12309	Aviation Ordnanceman 3, 2, & 1	Chapters 1-17 and Appendix I	Note 1
	AW-394AC-750-000	Aircraft Guided Missile Launcher LAU-115/A, A/A, B/A, C/A	Work Packages 001-014	Note 1
	A1-F18AE-LWS-000	Airborne Weapons/Stores Loading Manual F/A-18A/B/C/D	Chapters 1-32	Note 1
	A1-H60BB-LWS-000	Airborne Weapons/Stores Loading Manual SH-60B	Chapters 1-13	Note 1

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
AO2 (Cont)	NAVAIR-00-80T-103	NATOPS Conventional Weapons Handling Procedures Manual Ashore	Chapters 1-6	Note 1
	NAVAIR 00-80T-105	CV NATOPS Manual	Chapter 6	Note 1
	NAVAIR 00-80T-105 NAVAIR 00-80T-106	LHA/LPH/LHD NATOPS	Chapter 6	Note 1
		Manual	•	
	NAVAIR 01-AGM65E/F-1-2	AGM-65F (IR) & 65E (Laser) Maverick Missiles on F/A 18 A/C	Pages 1-62	Note 1
	NAVAIR 01-AIM9-2	AIM-9H/M Guided Missile and Training Missile	Work Packages 001-011	Note 1
	NAVAIR 01-F14AAA-2-4-13	Armament Systems F-14A, B, A/C	Work Packages 001-109	Note 1
	NAVAIR 01-F14AAA-75	Airborne Weapons/Stores Loading Manual F-14A/B/D	Chapters 1-18	Note 1
	NAVAIR 01-S3AAA-75	Airborne Weapons/Stores Loading Manual S-3	Chapters 1-25	Note 1
	NAVAIR 01-1A-509	Aircraft Weapons Systems Cleaning and Corrosion Control	Chapters 1-9 and Appendices A-E	Note 1
	NAVAIR 01-75PA-75	Airborne Weapons/Stores Loading Manual P-3	Chapters 1-21	Note 1
	NAVAIR 01-85AD-75	Airborne Weapons/Stores Loading Manual A-6 Series, EA-6, KA-6	Chapters 1-29	Note 1
	NAVAIR 11-1F-2	Description & Characteristic Airborne Bomb & Rocket Fuze Manual	Chapter 4	Note 1
	NAVAIR 11-5A-33	Dispenser and Mine A/C Weapons CBU 78/B (Gator)	Work Packages 001-006	Note 1
	NAVAIR 11-75A-54	A/C Guided Missile Launcher LAU 7/A Series	Work Packages 001-015	Note 1
	NAVAIR 11-75A-61	2.75-inch Airborne Rocket Launchers LAU 61A/A, B/A, C/A, 68B/A, D/A	Chapters 1-8	Note 1
	NAVAIR 11-75A-63	5.0-inch Airborne Rocket Launchers LAU 10 Series	Chapters 1-10	Note 1
	NAVAIR 11-75A-78	A/C Guided Missile Launcher LAU-118 (v) 1/A	Work Packages 001-011	Note 1
	NAVAIR 11-75A-79	A/C Guided Missile Launcher LAU-117 (a) 2/A	Work Packages 001-009	Note 1
	NAVAIR 11-75AA-48	Dispenser SUU 25F/A	Chapters 1-11	Note 1
	NAVAIR 11-85-5	Airborne Rockets	Chapters 1-7	Note 1
	NAVAIR 11-120A1.1 VOL-1	Airborne Weapons Packaging/Handling/Stowa ge Shipboard	Chapters 1-5	Note 1
	NAVAIR 11-120A1.2 VOL-2	Airborne Weapons Packaging/Handling/Stowa ge Shipboard	Chapters 6-10	Note 1

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
AO2 (Cont)	NAVAIR 11-140-24	Airborne Weapons Support Equipment Description & Characteristics	Chapters 1-30	Note 1
	NAVAIR 11-140-25	Airborne Weapons Support Equipment Configuration Manual	Chapters 1-18	Note 1
	NAVAIR 19-15BC-12	Bomb Skid Assembly Aero 12C	Work Package 001	Note 1
	NAVAIR 19-25E-51	Munitions Trailer Aero 51B, D	Work Packages 001-008	Note 1
	NAVAIR 19-25E-61	Small Munitions Trailer MHU 126/M, A/M	Work Packages 001-010	Note 1
	NAVAIR 19-25E-510	Munitions Trailer MHU 185/M	Work Packages 001-013	Note 1
	NAVAIR 28-10A-501	Aerial Tow Targets & Associated Equipment	Chapters 1-10	Note 1
	NAVSEA OP 4	Ammunition Afloat	Chapters 1-7	Note 1
	NAVSEA OP 5 VOL-1	Ammunition Ashore	Chapters 1-13	Note 1
	NAVSEA OP 5 VOL-3	Ammunition Ashore Advance Bases	Chapters 1-7	Note 1
	NAVSEA OP 2173 VOL-1	Approved Handling Equipment for Weapons & Explosives	Chapters 1-28	Note 1
	NAVSEA OP 2173 VOL-2	Approved Handling Equipment for Weapons & Explosives	Chapters 29-54	Note 1
	NAVSEA OP 3347	USN Ordnance Safety Precautions	Chapters 1-3	Note 1
	OPNAVINST 4790.2 VOL-1	The Naval Aviation Maintenance Program (NAMP)	Chapters 12 and 14	Note 2
	OPNAVINST 4790.2 VOL-3	The Naval Aviation Maintenance Program (NAMP)	Chapter 8	Note 2
	OPNAVINST 4790.2 VOL-4	The Naval Aviation Maintenance Program (NAMP)	Chapter 2	Note 2
	OPNAVINST 4790.2 VOL-5	The Naval Aviation Maintenance Program (NAMP)	Chapters 8, 11, 12, and 20	Note 2
	OPNAVINST 4790.4	Ships 3-M Maintenance, Material, and Management	Chapters 1-7	Note 2
	OPNAVINST 8600.2 VOL-1	The Naval Airborne Weapons Maintenance Program (NAWMP)	Chapters 1, 4, and 5	Note 2
	OPNAVINST 8600.2 VOL-2	The Naval Airborne Weapons Maintenance Program (NAWMP)	Chapters 1-8	Note 2
	OPNAVINST 8600.2 VOL-3	The Naval Airborne Weapons Maintenance Program (NAWMP)	Appendices A-L	Note 2

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
AO2 (Cont)	NAVSEA SG420-AP-MMA-010	Periodic Testing Arrangement for Ordnance Handling Equipment	Chapters 1-4	Note 1
	SG420-B5-WHS-010	Handling & Stowage of Air- Launched Weapons Aboard Amphibious Ships	Chapters 1-5	Note 1
	NAVSEA SW010-AF-ORD-010/ NAVAIR 11-1-117	Identification of Ammunition	Chapters 1-11	Note 1
	SG818-LL-MMA-020	Maintenance Manual for 8,000 pound Weapons Elevators Lower Stage	Chapters 1-7	Note 1
	SG818-LF-MMA-020	Maintenance Manual for 10,500 pound Weapons Elevators Lower Stage	Chapters 1-7	Note 1
	S9522-AA-HBK-010	Magazine Sprinkling Systems	Chapters 1-5	Note 1
	TW010-AA-ORD-030/ NAVAIR 11-1-116	Navy Ammunition Logistic Code (NALC)	Parts 1-5	Note 1
	NAVSEA TW010-AC-ORD-010	Inspection Requirements for Receipt, Segregation Stowage & Issue of Navy & Marine Corp Conventional Ammunition	Chapters 1-6 and Appendices A-E	Note 1
AO1	NAVEDTRA 12309	Aviation Ordnanceman 3, 2, & 1	Chapters 1-17 and Appendix I	Note 1
	NAVEDTRA 12017	Aviation Maintenance Ratings	Chapters 2 and 4-6	Note 1
	NAVAIR 01-1A-509	Aircraft Weapons Systems Cleaning and Corrosion Control	Chapters 1-9 and Appendices A-E	Note 1
	NAVAIR 16-1-540	Avionics Cleaning & Corrosion Prevention/Control	Chapters 1-10 and Appendices A-D	Note 1
	NAVAIR 17-1-125	Support Equipment Cleaning, Preservation, and Corrosion Control	Sections 1-8 and Appendices A and B	Note 1
	NAVSURFLANTINST 8023.4/COMNAVSURFPACI NST 8023.5	Explosives Handling Personnel Qualification & Certification (QUAL/CERT) Program	All Pages	Note 3
	NAVSEA OP 4	Ammunition Afloat	Chapters 1-7	Note 1
	NAVSEA OP 5 VOL-1	Ammunition Ashore	Chapters 1-13 and Appendices A-G	Note 1
	NAVSEA OP 5 VOL-3	Ammunition Ashore Advance Bases	Chapters 1-3, 5, 6, and Appendices A and B	Note 1

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
AO1 (Cont)	NAVORD OP 1014	Ordnance Safety Precautions their Origin and Necessity	Chapter 1	Note 1
	NAVSEA OP 2239	Motor Vehicle Driver's Handbook Ammunition, Explosives and Related Hazardous Materials	Chapters 1-8	Note 1
	NAVSEA OP 3565/NAVAIR 16-1-529 VOL-1	Electromagnetic Radiation Hazards	Chapters 1-8	Note 1
	NAVSEA OP 3565/NAVAIR 16-1-529 VOL-2 PART-1	Electromagnetic Radiation Hazards	Chapters 1-6	Note 1
	OPNAVINST 4790.2 VOL-1	The Naval Aviation Maintenance Program (NAMP)	Chapters 2, 4, 6, 10-17, 21, and Appendices A and B	Note 2
	OPNAVINST 4790.2 VOL-2	The Naval Aviation Maintenance Program (NAMP)	Chapters 1-4, and 6	Note 2
	OPNAVINST 4790.2 VOL-3	The Naval Aviation Maintenance Program (NAMP)	Chapters 2, 3, 9, 13, and Appendices A and B	Note 2
	OPNAVINST 4790.2 VOL-4	The Naval Aviation Maintenance Program (NAMP)	Chapters 3, 5-8 and Appendix A	Note 2
	OPNAVINST 4790.2 VOL-5	The Naval Aviation Maintenance Program (NAMP)	Chapters 2, 5-8, 10, 12-14, 17-20, and Appendix B	Note 2
	OPNAVINST 4790.4	Ships 3-M Maintenance, Material, and Management	Chapter 1	Note 2
	OPNAVINST 5100.19 VOL 1	Navy Occupational Safety & Health (NAVOSH) for Forces Afloat	Chapters A and B	Note 2
	OPNAVINST 5100.19 VOL 2	Navy Occupational Safety & Health (NAVOSH) for Forces Afloat	Chapter C	Note 2
	OPNAVINST 5100.23	Navy Occupational Safety and Health Program Manual	Chapters 1-12, 14-16, 18-21, 23, and 24	Note 2
		Hazardous Materials User's Guide	Introduction, Groups 1-15, and 19	Note 4
	OPNAVINST 8600.2 VOL-1	The Naval Airborne Weapons Maintenance Program (NAWMP)	Chapters 1 and 4-6	Note 2
	OPNAVINST 8600.2 VOL-2	The Naval Airborne Weapons Maintenance Program (NAWMP)	Chapters 1-8	Note 2

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
AO1 (Cont)	OPNAVINST 8600.2 VOL-3	The Naval Airborne Weapons Maintenance Program (NAWMP)	Appendices D, J, and H	Note 2
	NAVSEA SW020-AG-SAF-010	Navy Transportation Safety Handbook for Ammunition, Explosives and Related Hazardous Material	Chapters 1-9	Note 1
	NAVSEA TW010-AC-ORD-010	Inspection Requirements for Receipt, Segregation Stowage & Issue of Navy & Marine Corp Conventional Ammunition	Chapters 1-6	Note 1
AOC	NAVEDTRA 12309	Aviation Ordnanceman 3, 2, & 1	Chapters 1-17, and Appendix I	Note 1
	NAVEDTRA 12017	Aviation Maintenance Ratings	Chapters 1-7	Note 1
	NAVSEA OP 4	Ammunition Afloat	Chapters 1 and 3	Note 1
	NAVSEA OP 5 VOL-1	Ammunition Ashore	Chapters 1 and 2	Note 1
	OPNAVINST 4790.2 VOL-1	The Naval Aviation Maintenance Program (NAMP)	Chapters 9, 10, 12, 13, Appendices A and B	Note 2
	OPNAVINST 4790.2 VOL-2	The Naval Aviation Maintenance Program (NAMP)	Chapters 2, 3, and 11	Note 2
	OPNAVINST 4790.2 VOL-3	The Naval Aviation Maintenance Program (NAMP)	Chapters 1-4, 6, Appendices A, B, and C	Note 2
	OPNAVINST 4790.2 VOL-4	The Naval Aviation Maintenance Program (NAMP)	Chapters 3, 5-8 and Appendix A	Note 2
	OPNAVINST 4790.2 VOL-5	The Naval Aviation Maintenance Program (NAMP)	Chapters 10 and 12	Note 2
	OPNAVINST 5100.19 VOL 1	Navy Occupational Safety & Health (NAVOSH) for Forces Afloat	Chapter A	Note 2
	OPNAVINST 5100.23	Navy Occupational Safety and Health Program Manual	Chapter 14	Note 2
	OPNAVINST 5530.13	Physical Security Instruction for Conventional Arms, Ammunition & Explosives (AA&E)	Chapters 1-7 and Appendices A-I	Note 2
	OPNAVINST 5530.14B	Physical Security & Lost Prevention	Chapters 1-12 and Appendices I-XVII	Note 2

Rating	Short Title	Long Title	Chapters/ Paragraphs	Stocking Point
AOC (Cont)	OPNAVINST 8600.2 VOL-1	The Naval Airborne Weapons Maintenance Program (NAWMP)	Chapters 1 and 4-6	Note 2
	OPNAVINST 8600.2 VOL-2	The Naval Airborne Weapons Maintenance Program (NAWMP)	Chapters 6 and 8	Note 2

LEGEND:

Note 1 — To order, MILSTRIP to NAVICP PHILA (Stock No. from NAVSUP P2002) or via INTERNET http://www.nll/navsup.navy.mil/

Note 2 — INTERNET - http://neds.nebt.daps.mil/

Note 3 — Fleet Publications Library CD-ROM

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Note 4 — HMC&M/HMIS CD-ROM

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